INDIAN LANDS LUST
ELIGIBILITY PROFILE CHECKLIST – REGION 5

Site Name and Tribe Name:

Total Station #4312, Mount Pleasant, Michigan, on the Saginaw Chippewa Indian Reservation

1. Conduct a review of MDEQ District Office files to gather information for the final Summary Report.

   Laura Noland of Bristol Environmental Remediation Services, LLC (Bristol) contacted the Michigan Department of Environmental Quality (MDEQ) and requested files to be sent to the Bristol office in Anchorage, Alaska. A file review of the MDEQ files was conducted in Anchorage between May 13 and 23, 2008.

   The MDEQ Storage Tank Information Database lists this site as Site ID No. 00016792.

2. Provide site location and description using GPS equipment.

   Total #4312 is located at 815 North Mission Street, Mount Pleasant, MI 48858. GPS coordinates are 43 degrees 36.693 minutes north and 84 degrees 46.084 minutes west.

   As of June 10, 2008, the property consists of a vacant lot which is being used as a truck servicing area by Olson's Tire Service (see item 6 for additional site description). Site Photographs are included as Attachment A.

3. Provide the physical address and the general descriptive location of the site using County Assessor/Clerk data:

   Physical Address: 815 North Mission Street, Mount Pleasant, MI 48858. The property consists of 0.45 acres and is listed as parcel No. 17-000-09001-00.

   Legal Description: Kinney and Richmond Addition lots 1 & 4 Block 1. Also abutting ½ of vacated alley (vacated 5/2000).

   a. Coordinate with Region 5 COR prior to visiting with the tribal business office to find out about site ownership information.

      Laura Noland of Bristol met with Mr. Donald L. Seal, Community Engineer with the Tribal Planning Department and Ms. Kelly Pilarski, Tribal G.I.S. Analyst at the Saginaw Chippewa Indian Tribe office in Mount Pleasant, Michigan on June 10, 2008.

      Mr. Seal stated that the Saginaw Chippewa Indian Tribe has no information available regarding the site and that the properties within the City of Mt. Pleasant are owned as fee simple land. Mr. Seal provided a map delineating tribal lands in Isabella County.

   b. Coordinate with Region 5 COR prior to visiting the local Bureau of Indian Affairs (BIA) office for leasing information.

      The BIA only has leasing information for trust lands. This site is not trust land.

   c. Coordinate with Region 5 COR prior to conducting interviews with surrounding local businesses and or residents.

      No interviews with surrounding businesses were conducted.

d. Coordinate with Region 5 COR prior to conducting an on site review of tribal facility files at the MDEQ offices.

Laura Noland of Bristol met with Larry Engelhart, Senior Geologist and Rhonda Klann, Senior Environmental Quality Analyst at the MDEQ Saginaw Bay District Office in Bay City, Michigan on June 11, 2008.

4. Contact County Assessor/Clerk and District Attorney to ascertain legal ownership.

Bristol contacted the Mount Pleasant City Treasurer Office's assessment department in Mount Pleasant, Michigan (989-779-5355). The Treasurer's office also has an online service where assessment data for a property can be obtained. The General Property Information sheet for this site is included in Attachment B. The current property owner is listed as Total Petroleum, Inc., 28001 Citrin Dr, Romulus, MI 48174, and phone (734) 946-5500.

5. Obtain copies of the lease and facility ownership information (lease ownership may be different from facility ownership information).

a. Specify the ownership(s) of the site, i.e., tribal or private on which the station of facility was/is located from January 1, 1978 to the present. Provide all relevant documents, which provide evidence of such ownership(s). Provide name(s), address, and phone of the property owner(s) and lessors.

Title Information: Stanley Oil Company sold the property to William H. Boutell and Nancy S. Boutell on June 22, 1978. The property was sold by William H. Boutell to Richard J. Mooney on May 12, 1993. On May 18, 1993, Richard J. Mooney sold the property to Mooney Oil Corporation. Mooney Oil Corporation sold the property to The Total Petroleum Master Trust on October 25, 1995. The property was leased by the Total Petroleum Master Trust to Total Michigan, Inc on October 25, 1995. The Total Petroleum Master Trust sold the property to TPI Petroleum, Inc. on October 18, 1999. TPI Petroleum, Inc. sold the property to Olson Firestone Service, Inc on November 5, 1999 in a Special Warranty Deed which included restrictions on the property including that the property be commercial use only and the Grantee agrees never to drill a water well on the property. The title search is included in Attachment C.

b. Specify what parties have operated the station or facility from January 1, 1978 to the present. Provide a copy of all relevant documents, which provide evidence of what parties operated the station or facility.

Stanley Oil Company owned the property prior to 1978. The Boutell's owned the property from June 1978 until May 1993. The property was operated by the Mooney Oil Corporation from May 1993 until October 1995. The Total Petroleum Company operated the property from October 1995 until October 1999. The Total Petroleum Company is a leading independent refiner and marketer of high quality petroleum products. The site is currently owned by Olson Firestone Service Inc.

6. Provide current site condition summary overview. Describe the current condition of the site; what apparatus is still present at the site. Is the site abandoned? What activities or operations are still present at the site/location?

   The site is active and currently consists of a paved area which measures approximately 0.45 acres. There are no buildings on the site. The site is located on the southwest corner of the intersection of Mission Street and Pickard Avenue. Olson's Tire Service is located immediately west of the site. CarQuest Auto Parts is located south of the site.

   According to Mr. Tim Olson, the manager of the Olson's Tire Service, he uses the site to service the tires on trucks. A sign stating "Truck Service" was located at the site. What appeared to be an air compressor was the only apparatus observed at the site during the site visit. Monitoring well caps were still visible at the site and appeared to be accessible. Mr. Olson stated that Olson's Tire service "owns the property, but not the contamination". He was concerned that the concrete not be torn up with any future remediation at the site.

7. Provide site historical background summary. Describe the historical background of the site/facility operations.

   Historical background information regarding this site is limited. The site was formerly operated as a Total Petroleum gasoline retail station. A confirmed gasoline release occurred in February, 1999. According to site diagrams, the service station consisted of two dispensing islands and a building which was located in the southwest corner of the site.

8. Describe the history of fueling operations at the station:

   a. Identify (dates) all current and former underground gasoline, diesel and waste oil storage tanks and associated piping systems that were on the property.

      Four registered underground storage tanks (USTs) were installed at the site in 1976, and are documented as having been disposed of by Total Petroleum on February 23, 1999. The USTs were located within two tank farms. One farm, the southeastern tank farm, contained two 6,000 gallon tanks and a 12,000 gallon tank, and the other farm, in the northwestern section of the property, contained a 6,000 gallon tank.

   b. Provide copies of all tank installation and removal records (with dates) for the site. The report shall include a listing of all past and current records of tanks systems on the site.

      No records have been found.

   c. Provide all maintenance records concerning the operation of the past and current tank and piping systems at the facility.

      No records have been found.

9. Provide recommendations to the EPA COR for potential corrective action activities. Describe what actions would be required to remove soil and/or groundwater contamination from the site.

   In the March 2007 Final Assessment Report (FAR) (attached as attachment D), EnviroSolutions presents several remediation alternatives for the continued remediation of

the site. Bristol recommends determining whether corrective actions are still occurring at the site, and if so, then no further action.

10. Provide the details on the environmental/release information of the facility. Provide the details on the environmental/release information of the facility. Provide a copy of all documents which relate to any releases to soil or groundwater of gasoline form the underground storage tanks and associated piping from the facility since January 1, 1978. Also provide information of the site geology and environmental receptors of the surrounding area. Identify the local groundwater source and provide the description of the population density of the surrounding area.

The site was originally assessed for subsurface conditions in February of 1999. The original investigation was performed by Compliance Inc., they ran investigations from February 1999 to January 2004. NESA Inc. became the consultant of record in January 2004. Environmental Solutions Inc. (ESI) began investigations of the site release in January 2006. ESI's scope was to define the vertical and horizontal extent of adsorbed and dissolved hydrocarbon impact, establish a feasible corrective action plan (CAP), and prepare a FAR associated with unleaded gasoline confirmed release C-0163-99.

Free product was encountered on February 23, 1999, during UST removal activities. The consulting company, Compliance, noted that there was one-eighth to one-quarter inch of free phase product within the southeastern tank excavation. Field screening of ambient air in a utility corridor adjacent to the site was tested and yielded no vapors above background levels. The four USTs were removed, and the soil from the excavation was placed back into the removal area without collecting soil samples. One monitoring well was installed within the former southeastern tank excavation. A soil sample was obtained from beneath each of the seven former dispenser islands.

In April of 1999 four soil borings were installed and four monitor wells were installed. In May of 1999 one-half gallon of product was noted within monitoring well MW-2, located approximately 60 feet north of the former southeastern UST cavity and directly beneath the former northeastern dispenser.

In July of 1999 one hundred cubic yards of impacted soil surrounding monitoring well MW-2 were removed and disposed. One-thousand-five-hundred gallons of impacted groundwater and free product were removed for disposal from the excavation surrounding monitoring well MW-2. The excavation was backfilled with clean sand. Confirmation soil samples were not collected at that time.

Free product was identified in monitoring well MW-3 in March 2000. Product was identified in monitoring wells MW-10 and MW-11 (installed in March 2000) for the first time in September, 2000. From the initial date of free product discovery through September 20, 2000, 1,503 gallons of product were removed from wells MW-2, MW-3, MW-10 and MW-11.

A Multi-Arrayed Vacuum Recovery System (MAV System) was installed and became operational on September 21, 2000. The purpose of the MAV system was to promote aggressive removal of free product. The MAV system was installed with three vacuum points located at the northwestern excavation (north of MW-3) and three vacuum points located near MW-2 (area where 100 cubic yards of soil was excavated). All vacuum well points

located at the northwestern excavation (north of MW-3) and three vacuum points located near MW-2 (area where 100 cubic yards of soil was excavated). All vacuum well points were reported to be set at 13 feet below ground surface.

On September 21, 2000, 1,250 gallons of product and water was removed from the site via the MAV System. The MAV system has reportedly removed a total of 34,533 gallons of water/dissolved hydrocarbons and free product from the site from September 2000 through December 2003. Although the MAV system, as of the March 2007 FAR, had not been operational since December 2003, documentation by Compliance supports their position that the remediation system was effective. Measured product thickness was greater than 20 inches, in some locations prior to MAV System implementation. The MAV system reduced measured product thickness to non-detect in all wells for the 1st through 3rd quarters of 2004. However, the absence and subsequent reappearance of product may be attributed to groundwater fluctuations (rebounding and groundwater gradient changes).

In the March 2007 FAR (attached as attachment D), EnviroSolutions presents several remediation alternatives for the continued remediation of the site. The most cost effective, and suggested alternative is Chemical Oxidation. This process involves pumping contaminated groundwater from extraction wells, treating the water with ozone and hydrogen peroxide and then re-injecting the treated water into injection wells located within the source plume. The treatment of water with ozone and hydrogen peroxide is called "advanced oxidation".

The population of Mount Pleasant is approximately 27,000 people. The water source for the City of Mt. Pleasant is groundwater, drawn from seven groundwater wells and a Ranney Collector well. The groundwater wells are located south and southwest of Mt. Pleasant and range from 120 to 465 feet deep. The Ranney Collector is located southwest of Mt. Pleasant adjacent to the Chippewa River. Water from the wells and the Collector well is pumped to a Water Treatment Plant and sent to the distribution system.

The site is located in a business and residential area of town. Pullen Elementary School is located within ½ mile of the site. Central Michigan University is less than 1 mile away.

The MDEQ Storage Tank Information Database lists the release status of this site as open. The MDEQ listing is included as Attachment E.

11. Provide and/or take pictures of the site and surrounding area, especially photos of, e.g., fill pipes, dispense pad, stained soil, surface water bodies, water wells and other note worthy items.

Current site photographs are included as Attachment A.

12. Provide site/facility schematic. Provide a schematic of the site will all associated structures. If possible identify the existing and past locations of the underground water and associated piping on the schematic.

A site plan is included as Figure 1.

13. Provide the date and owner of record when tanks were taken out of services and put in service since January 1, 1978.

Four registered USTs, owned by Total Petroleum were installed at the site in 1976, and are documented as having been removed by Total Petroleum on February 23, 1999.

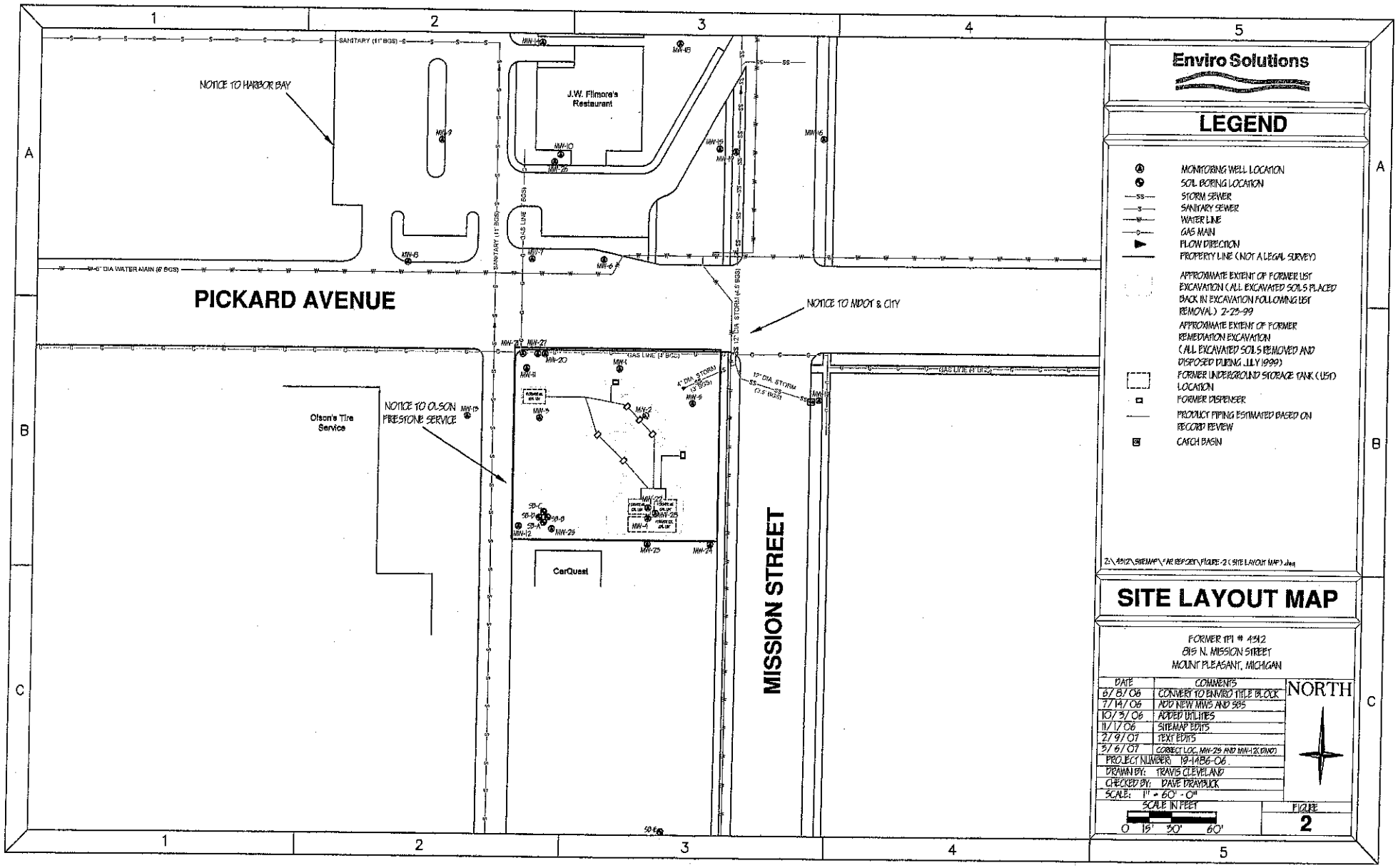
14. Other Noteworthy items of Interest, if unable to complete Items 1 – 13 above, state your reasons why.

For any items that were unable to be completed, the reason for the incompletion is stated under its respective item number.

15. Provide a summary detail of the condition and contents of the underground storage tanks at the site.

Four USTs were removed in 1999. No USTs are currently at the site.

FIGURE


NOTICE TO HARBOR BAY
J.W. Fllmore's Restaurant
PICKARD AVENUE
NOTICE TO MDOT & CITY
Olson's Tire Service
NOTICE TO OLSON FIRESTONE SERVICE
CarQuest
MISSION STREET
SANITARY (11' BGS)
6" DIA WATER MAIN (6' BGS)
GAS LINE (3' BGS)
12" DIA STORM (4.5' BGS)
4" DIA STORM (3' BGS)
Enviro Solutions
LEGEND
MONITORING WELL LOCATION
SOIL BORING LOCATION
STORM SEWER
SANITARY SEWER
WATER LINE
GAS MAIN
FLOW DIRECTION
PROPERTY LINE (NOT A LEGAL SURVEY)
APPROXIMATE EXTENT OF FORMER UST EXCAVATION (ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING UST REMOVAL) 2-25-99
APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION (ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
FORMER DISPENSER
PRODUCT PIPING ESTIMATED BASED ON RECORD REVIEW
CATCH BASIN
Z:\4512\SITEMAP\FAR REPORT\FIGURE-2 (SITE LAYOUT MAP).dwg
SITE LAYOUT MAP
FORMER TP1 # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN
DATE
COMMENTS
6/8/06
CONVERT TO ENVIRO TITLE BLOCK
7/14/06
ADD NEW MW5 AND SB5
10/31/06
ADDED UTILITIES
11/17/06
SITEMAP EDITS
2/9/07
TEXT EDITS
3/6/07
CORRECT LOG, MW-29 AND MW-12 (DND)
PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DRAYBUCK
SCALE: 1" = 60' - 0"
SCALE IN FEET
0 15' 30' 60'
NORTH
FIGURE
2

ATTACHMENT A

Current Site Photographs

Photograph 1: The former Total #4312 Station is now used as a Truck Service area for Olson's Tire Service. View is from the southern portion of the site facing northeast towards North Mission Street.

Photograph 2: The site is now a paved area with no buildings, or structures. View is from the southwest corner of the property facing east towards North Mission Street.

Photograph 3: View is from the northern area of the site looking towards the southwest. Tire servicing equipment on the right. CarQuest business is adjacent to the property on the west property line.

Photograph 4: Site is well maintained with landscaping. View towards the southeast. Groundwater monitoring well cover is evident in the foreground.

Photograph 5: Truck Service area is signed. Olson's Tire Service is north of the site.

ATTACHMENT B

Mount Pleasant Tax Assessor Office

General Property Information

City of Mt Pleasant
internet services

General Property Information

Printer friendly version

Parcel: 17-000-09001-00 **Data Current As Of:** 5:50 PM 5/02/2008

Property Address [collapse]

815 N MISSION ST
MT PLEASANT, MI 48858

Owner Information [collapse]

OLSON FIRESTONE SERVICE INC
704 E PICKARD
MT PLEASANT, MI 48858

Unit: 17

Taxpayer Information [collapse]

SEE OWNER INFORMATION

General Information for Tax Year 2007 [collapse]

Property Class:	209	**Assessed Value:**	$68,400
School District:	37010 - District 37010	**Taxable Value:**	$65,691
State Equalized Value:	$68,400	**Map #**	N/A
User Number Indx:		**Date of Last Name Chg:**	N/A

Date Filed:
Principal Residence Exemption (2007 May 1): N/A
Principal Residence Exemption (2007 Final): N/A
Principal Residence Exemption (2008 May 1): 0.0000 %

Previous Year Info	MBOR Assessed	Final S.E.V.	Final Taxable
2006	$68,400	$68,400	$63,348
2005	$68,400	$68,400	$61,325

Land Information [collapse]

Acreage:	0.45	**Frontage:**	0.00 Ft.
Zoning Code:	C-3	**Depth:**	0.00 Ft.
Land Value:	$136,800	**Mortgage Code:**	N/A
		Lot	

Land Improvements:	$0	**Dimensions/Comments:**	N/A
Renaissance Zone:	N/A		

Legal Information [collapse]

KINNEY & RICHMOND ADD. LOTS 1 & 4 BLK 1. ALSO ABUTTING 1/2 OF VACATED ALLEY(VACATED 5/2000) NOTE: TIFA DIST #4 - MISSION ST DDA

Sales Information

6 sale record(s) found.

Sale Date	Sale Price	Instrument	Grantor	Grantee	Terms Of Sale	Liber/Page
11/12/1999	$10.00	IV	TOTAL PETRO MASTER TRUST#4213	TPI PETROLEUM INC	QC	966/927
11/12/1999	$178,000.00	IV	TPI PETROLEUM INC	OLSON FIRESTONE SERVICE INC	OTHER	966/931
10/25/1995	$280,000.00	IV	WD		OTHER	843/984
05/18/1993	$245,000.00	IV	WD		OTHER	786/131
05/12/1993	$1.00	IV	WD/LC 1986		LC PAY OFF	785/148
05/06/1993	$1.00	IV	QC/JMT DIV		QC	784/13

☐ Load Building Information on this Page.

ATTACHMENT C

Title Search

File No. MP-08-2212
Total #4312,1827
815 N. Mission, Mt. Pleasant

TITLE SEARCH

* *

CORPORATE TITLE AGENCY hereby certifies that the attached entries numbered 1 to 15 inclusive, are all deeds, land contracts and other instruments evidencing a transfer in ownership of record, and any environmental liens of record in the office of the Isabella County Register of Deeds describing the following land:

Lots 1 and 4 in Block 1 of Kinney and Richmond's Addition to the City of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, Page 95, Isabella County, Michigan.

This search does not include mortgages, liens, easements, and instruments pertaining to oil, gas and other minerals.

Period of Search: From January 1, 1978 at 8:00 a.m.

To June 20, 2008 at 8:00 a.m.

CORPORATE TITLE AGENCY

By _____

For Inquiries contact:
Corporate Title Agency
209 E. Broadway
Mt. Pleasant, MI 48858
989-773-3241

Entry 1

LIBER 437 PAGE 450

Lawyers Title Insurance Corporation

Form 563 6-71

WARRANTY DEED—CORPORATION—Statutory Form

C.L. 1948, 565.151 M.S.A. 26.571

KNOW ALL MEN BY THESE PRESENTS: That Stanley Oil Company, a Michigan corporation,

whose address is East Superior Street, Alma, Michigan 48801

Conveys and Warrants to William H. Boutell and Nancy S. Boutell, his wife,

whose address is 312 Davidson Building, Bay City, Michigan 48706

the following described premises situated in the City of Mt. Pleasant

County of Isabella and State of Michigan, to-wit:

Lots 1 and 4, Block 1, Kinney and Richmond's Addition to the City of Mt. Pleasant according to the Plat recorded in Liber 2 of Plats, Page 95, Isabella County Records.

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD

1978 AUG -2 PM 4 00

for the full consideration of Sixty Thousand ($60,000.00) Dollars

subject to easements and restrictions of record.

Dated this 22nd day of June 1978

Witnesses:

Debbie Mailand
Debbie Mailand

Phyllis Love
Phyllis Love

REGISTER OF DEEDS

Signed and Sealed:

Stanley Oil Company (L.S.)

By P. H. Gutknecht
P. H. Gutknecht,

Its Vice President

By Earl H. Warner

Its Asst. Secretary

STATE OF MICHIGAN
COUNTY OF Gratiot } ss.

The foregoing instrument was acknowledged before me this 22nd day of June 1978

(1) by P. H. Gutknecht and Earl H. Warner

(2) Vice President and Asst. Secretary

(3) of Stanley Oil Company

(4) a Michigan

Corporation on behalf of the said corporation.

LENORE J. FISHER
Notary Public, Isabella County, Mich.
My Commission Expires May 8, 1979
Acting in Gratiot County, Mich.

My commission expires

Notary Public Gratiot County, Michigan

Note: Insert at (1) name(s) of officer(s) (2) title(s) of officers(s) (3) name of corporation (4) state of incorporation

Instrument Drafted by Al Tyson

Business Address 28001 Citrin Drive, Romulus, Michigan 48174

County Treasurer's Certificate

I HEREBY CERTIFY that there are no tax liens or titles held by the State or individuals on the lands described in the within instrument and that all taxes are paid as shown by the records of this office for five years.

Eunice J. Strockbocker
Treasurer of Isabella County

City Treasurer's Certificate

STATE OF REAL ESTATE
TRANSFER TAX
50.00

When recorded return to William H. Boutell, 312 Davidson Building, Bay City, Michigan 48706

Send subsequent tax bills to William H. Boutell, 312 Davidson Building, Bay City, Michigan 48706

#0479

Entry 2

RECORDED IN DEEDS   LIBER 511 PAGE 330

STATE [illegible] MICHIGAN
COUNTY [illegible] ISABELLA
RECEIVED [illegible] RECORD
JAN 12 11 39 AM '83
[signature]
REGISTER OF DEEDS

QUIT-CLAIM DEED—Short—BBS — (Rev. 1957)
(Photo Copy Form) The Rikli Press, Inc., Flint, Michigan   SPACE ABOVE FOR REAL ESTATE TRANSFER STAMP

THIS INDENTURE, made January 4 19 83

BETWEEN WILLIAM H. BOUTELL, a married man,

party of the first part,

whose address is 222 Athlone, Bay City, Michigan

WILLIAM H. BOUTELL and NANCY S. BOUTELL, his wife, as tenants by the entireties

parties of the second part,

whose address is 222 Athlone, Bay City, Michigan

Witnesseth, That the said party of the first part, for and in consideration of [2] EXEMPT UNDER MCLA 207.505(1)

to him in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, does by these presents grant, bargain, sell, remise, release and forever QUIT-CLAIM unto the said party of the second part, and to [3]his heirs and assigns, Forever, all that certain piece or parcel of land situated in the City of Mt. Pleasant, in Isabella County, and State of Michigan, and described as follows:

Lots 1 and 4 in Block 1 of Kinney and Richmond's Addition to the City of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, page 95, City of Mt. Pleasant, Isabella County, Michigan.

Together with all and singular the hereditaments and appurtenances thereunto belonging or in anywise appertaining: *To Have and to Hold* the said premises to the said party of the second part, and to [3]his heirs and assigns, to the sole and only proper use, benefit and behoof of the said party of the second part, [3]his heirs and assigns, Forever.

(When applicable, pronouns and relative words shall be read as plural, feminine or neuter, respectively.)

In Witness Whereof, The said party of the first part has hereunto set his hand the day and year first above written.

Signed, Sealed and Delivered in Presence of

[signature]
WILLIAM R. LESER

[signature]
BARBARA E. BUCHALSKI

[signature]
WILLIAM H. BOUTELL

STATE OF MICHIGAN, } ss.
COUNTY OF BAY }

On January 4, 1983, before me, a Notary Public, in and for said County, personally appeared WILLIAM H. BOUTELL, a married man

to me known to be the same person described in and who executed the within instrument, who acknowledged the same to be his free act and deed.

[4]DRAFTED BY: WILLIAM R. LESER, ESQ.
Lambert, Leser, Hebert & Dalm, P.C.
309 Davidson Bldg., P.O. Box 835
Bay City, Michigan 48707

[signature]
Barbara E. Buchalski, Notary Public,
Bay County, Michigan,
My commission expires 10/7, 19 84

SEE FOOT NOTES ON OTHER SIDE

Entry 3

QUIT CLAIM DEED — 863 07051 LIBER 564 PAGE 684 (State Bar of Michigan Form)

Available from TARGET INFORMATION MANAGEMENT, INC. • P.O. Box 23003, Lansing, MI

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD
JUL 19 11 04 AM '85
REGISTER OF DEEDS

The Grantor(s) Nancy S. Boutell, a single woman, formerly married to Grantee herein, but now divorced from him , whose address is 222 Athlone Beach, Bay City, MI

quit-claim(s) to William H. Boutell, a single man,

whose address is 1121 Nantucket, Bay City, MI

the following described premises situated in the of , County of Isabella and State of Michigan:

Property described: See attached

This conveyance made pursuant to the terms of a "Property Settlement Agreement" dated May 29, 1985, and a "Judgment of Divorce" dated June 24, 1985. Nancy S. Boutell conveys any and all interest she may have in the described property, including any and all dower rights.

~~for the sum of~~ This transfer exempt from transfer tax under MCLA 207.508(1).

Dated this 24th day of June , 19 85

Signed in presence of:

* JOHN J. HEBERT

* RALPH J. ISACKSON

Signed by:

* Nancy S. Boutell

STATE OF MICHIGAN, } ss.
COUNTY OF Bay

The foregoing instrument was acknowledged before me this 24th day of June 19 85, by Nancy S. Boutell the Grantor herein

* RALPH J. ISACKSON

Notary Public, Bay County, Michigan

My commission expires: 1/26/86

When Recorded Return To:	Send Subsequent Tax Bills To:	Drafted By:
John J. Hebert (Name) 309 Davidson Bldg, P.O. Box 835 (Street Address) Bay City, MI 48707 (City and State)	William H. Boutell 1121 Nantucket Bay City, MI	Lambert, Leser, Hebert, Dahm, Giunta & Cook BY: John J. Hebert Business Address: 309 Davidson Bldg. P.O. Box 835 Bay City, MI 48707

Tax Parcel # ______ Recording Fee ______ Transfer Tax ______

* TYPE OR PRINT NAMES UNDER SIGNATURES.

Entry 4

16925

QUIT CLAIM DEED — 863 LIBER 590 PAGE 666

Available from TARGET INFORMATION MANAGEMENT, INC. • P.O. Box [illegible], Canton, MI 48187 (State Bar of Michigan Form)

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD
Sep 11 10 26 AM '86
REGISTER OF DEEDS

The Grantor(s) WILLIAM H. BOUTELL, a single man,
, whose address is
1121 Nantucket Drive, Bay City, MI 48706
quit-claim(s) to WILLIAM H. BOUTELL, TRUSTEE U/A OF TRUST WITH WILLIAM H. BOUTELL AS GRANTOR, DATED September 4, 1986
whose address is 1121 Nantucket Drive, Bay City, MI 48706

the following described premises situated in the City of Mt. Pleasant, County of Isabella and State of Michigan:

PARCEL ONE:

Lots 1 and 4 in Block 1 of Kinney and Richmond's Addition to the City of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, page 95, City of Mt. Pleasant, Isabella County, Michigan.

PARCEL TWO:

Commencing at the W¼ corner of Section 23, T14N, R4W; thence N 722.9 feet along the W Sec. line to a point that is S 608.5 feet along the W Sec. line from the NW corner of the S½ of NW¼ of said Sec. 23, thence N 89°50'30" E 50.0 feet to the E'ly ROW line of Mission St. (E.R. US-27) and the Point of Beginning, thence N 89°50'30" E 150.0 feet, thence S 100.0 feet parallel to the W Sec. line, thence S 89°50'30" W 150.0 feet to the E'ly ROW line of Mission St., thence N 100.0 feet along said ROW line to the Point of Beginning.

for the sum of EXEMPT MCLA 207.505 (1)

Dated this day of , 19 86

Signed in presence of:

William R. Leser

Anna J. Averill

Signed by

WILLIAM H. BOUTELL

STATE OF MICHIGAN, } ss.
COUNTY OF BAY }

The foregoing instrument was acknowledged before me this 4th day of September, 19 86, by William H. Boutell

Anna J. Averill
Notary Public, Bay County, Michigan
My commission expires: 9/12/88

When Recorded Return To:	Send Subsequent Tax Bills To:	Drafted By:
William H. Boutell, Trustee (Name) 1121 Nantucket Dr. (Street Address) Bay City, MI 48706 (City and State)	William H. Boutell, Tr. 1121 Nantucket Dr. Bay City, MI 48706	William R. Leser (P16570) Business Address: 309 Davidson Building P.O. Box 835 Bay City, MI 48707

Tax Parcel # Recording Fee Transfer Tax

* TYPE OR PRINT NAMES UNDER SIGNATURES.

Entry 5

19725 LIBER 597 PAGE 503

4

MEMORANDUM OF LAND CONTRACT

THIS MEMORANDUM OF LAND CONTRACT entered into this 21st day of November, 1986, by and between William H. Boutell, Trustee Under Agreement of Trust with William H. Boutell as Grantor, dated September 4, 1986, hereinafter referred to as "Seller," and Richard J. Mooney, a married man, 4773 W. Grand River, Lansing, Michigan 48906, hereinafter referred to as "Buyer".

WITNESSETH:

The Buyer and Seller are parties to a Land Contract dated November 21, 1986, and they desire to enter into this Memorandum of Land Contract to give record notice of the existence of said Land Contract.

The Buyer and Seller acknowledge and agree that the property described on the attached Schedule A was sold to the Buyer on Land Contract on November 21, 1986, and that said Contract is in full force and effect; said property being located in the City of Mt. Pleasant, Isabella County, Michigan.

WITNESSES:

Jonathon R. White

Helen L. Bongard

Jonathon R. White

Helen L. Bongard

WILLIAM H. BOUTELL, TRUSTEE UNDER AGREEMENT OF TRUST WITH WILLIAM H. BOUTELL AS GRANTOR, DATED SEPTEMBER 4, 1986

By: William H. Boutell, Trustee

Richard J. Mooney

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECORDED

DEC 10 12 45 PM '86

REGISTER OF DEEDS

On this 21st day of November, 1986, before me, a Notary Public, in and for said County, personally appeared William H. Boutell, Trustee Under Agreement of Trust with William H. Boutell as Grantor, Dated September 4, 1986.

Helen L. Bongard, Notary Public
Gratiot, acting in Ingham County, Michigan
Commission Expiration: 2/3/87

On this 21st day of November, 1986, before me, a Notary Public, in and for said County, personally appeared Richard J. Mooney, a married man.

Helen L. Bongard, Notary Public
Gratiot, acting in Ingham County, Michigan
Commission Expiration: 2/3/87

This document prepared by:
Jonathon R. White, Esq.
HUBBARD, FOX, THOMAS, WHITE & BENGTSON, P.C.
500 Michigan National Tower
Lansing, Michigan 48933

Entry 6

QUIT CLAIM DEED

The Grantor Susan E. Mooney, a/k/a Edith Susan Mooney and a/k/a Susan Alina Mooney, a single woman, whose address is 4800 Malpaso, Lansing, Michigan 48917,

quit-claims to Richard J. Mooney, a single man, whose address is 4773 W. Grand River Avenue, Lansing, Michigan 48906,

the following described premises situated in the City of Mount Pleasant, County of Isabella, and State of Michigan:

Lots 1 and 4, in Block 1 of Kinney and Richmond's Addition to the City of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, Page 95, City of Mt. Pleasant, Isabella County, Michigan,

pursuant to a Judgement of Divorce dated March 23, 1993, Eaton County Circuit Court File No. 92-654-DO.

This conveyance exempt from taxation under MSA 7.456(5)(j).

Dated this 6th of May, 1993.

Signed in presence of:

Thomas L. Lapka

Sue A. Marsh

Signed by:

Susan E. Mooney

STATE OF MICHIGAN)
) ss.
COUNTY OF EATON)

The foregoing instrument was acknowledged before me this 6th day of May, 1993, by Susan E. Mooney, a single woman.

Sue A. Marsh, Notary Public
Eaton County, Michigan
My commission expires: 2/8/95

When Recorded Return To:
Jonathon R. White
5801 W. Michigan Avenue
P.O. Box 80857
Lansing, Michigan 48908-0857

Drafted By:
Jonathon R. White
HUBBARD, FOX, THOMAS,
WHITE & BENGTSON, P.C.
5801 W. Michigan Avenue
P.O. Box 80857
Lansing, Michigan 48908-0857
(517) 886-7176

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED

MAY 13 11 48 AM '93

REGISTER OF DEEDS

28819

LIBER 785 PAGE 148

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD
MAY 24 2 50 PM '93
Nelda L. Gilmore
REGISTER OF DEEDS

WARRANTY DEED Entry 7

The Grantor(s) WILLIAM H. BOUTELL, TRUSTEE WITH WILLIAM H. BOUTELL AS GRANTOR, DTD. SEPTEMBER 4, 1986

whose address is P.O. Box 750, Bay City, MI 48707

convey(s) and warrant(s) to RICHARD J. MOONEY,a single man

whose address is 4773 West Grand River Ave., Lansing, Michigan

the following described premises situated in the CITY of MT. PLEASANT, COUNTY of ISABELLA and STATE of MICHIGAN, described as follows:

Lots 1 and 4 in Block 1 of Kinney and Richmond's Addition to the City of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, page 95, City of Mt. Pleasant, Isabella County, Michigan.

THIS CONVEYANCE IS MADE IN PARTIAL FULFILLMENT OF A LAND CONTRACT BETWEEN THE PARTIES HERETO, DATED NOVEMBER 21, 1986, AND GRANTOR WARRANTS ONLY AS TO ALL ACTS PRIOR TO SAID DATE, AND ANY ACTS OF GRANTOR AFTER SAID DATE.

AFFIDAVIT FILED

for the sum of ONE DOLLAR AND OTHER GOOD AND VALUABLE CONSIDERATION

subject to easements, reservations and building and use restrictions of record.

Dated this 12th day of May, 1993

Signed in presence of:

* Judy Szczepanik

* Tim D. Boutell

Signed By:

WILLIAM H. BOUTELL, TRUSTEE U/A WITH WILLIAM H. BOUTELL AS GRANTOR, DTD. SEPTEMBER 4, 1986

By: William H. Boutell
WILLIAM H. BOUTELL, TRUSTEE

STATE OF MICHIGAN)
) ss.
COUNTY OF BAY)

The foregoing instrument was acknowledged before me this 12th day of May, 1993, by WILLIAM H. BOUTELL, TRUSTEE.

* Pauline Gwizdala
PAULINE GWIZDALA
Notary Public, BAY County, MI
Commission Expires:

Notary Public, Bay County, MI
My Commission Expires Nov. 23, 1996

When Recorded Return To:

Send Subsequent Tax Bills To:

Drafted by:
WILLIAM R. LESER (P16570)
LAMBERT, LESER, COOK, SCHMIDT & GIUNTA, P.C.
309 Davidson Building
P.O. Box 835
Bay City, MI 48707

STATE OF MICHIGAN
COUNTY OF ISABELLA
I HEREBY CERTIFY that there are no tax liens or titles held by the State or individuals on the lands described in the within instrument, and that all taxes are paid as shown by the records of this office for five years.
Treasurer of Isabella County

Tax Parcel #_____ Recording Fee _____ Transfer Tax_____

Entry 8

WARRANTY DEED

The Grantor Richard J. Mooney, a single man, whose address is 4773 West Grand River Avenue, Lansing, Michigan 48906,

conveys and warrants to Mooney Oil Corporation, a Michigan corporation, whose address is 4773 West Grand River Avenue, Lansing, Michigan 48906,

the following described premises situated in the City of Mount Pleasant, County of Isabella and State of Michigan:

> Lots 1 and 4, in Block 1 of Kinney and Richmond's Addition to the City of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, Page 95, City of Mt. Pleasant, Isabella County, Michigan,

for the sum of Two Hundred Forty Five Thousand and No/100 ($245,000.00) Dollars.

This conveyance is subject to easements and building and use restrictions of record.

Dated this 18th of May, 1993.

Signed in presence of:

Jonathon R. White

Jerri L. Luidens

Signed by:

Richard J. Mooney

STATE OF MICHIGAN
COUNTY OF ISABELLA
I HEREBY CERTIFY that there are no tax liens or titles held by the State or individuals on the lands described in the within instrument, and that all taxes are paid as shown by the records of this office for five years.
Steven W. Pickens
Treasurer of Isabella County

STATE OF MICHIGAN)
) ss.
COUNTY OF EATON)

The foregoing instrument was acknowledged before me this 18th day of May, 1993, by Richard J. Mooney.

Jerri L. Luidens, Notary Public
Ingham acting in
Eaton County, Michigan
My commission expires: 8/17/93

When Recorded Return To:

Jonathon R. White
P.O. Box 80857
Lansing, Michigan 48908-0857

Drafted By:

Jonathon R. White
HUBBARD, FOX, THOMAS,
WHITE & BENGTSON, P.C.
5801 W. Michigan Avenue
P.O. Box 80857
Lansing, Michigan 48908-0857
(517) 886-7176

j:kak:corp:doc.445

MICHIGAN REAL ESTATE TRANSFER TAX
DEPT of TAXATION - ISABELLA COUNTY $ 269.50
6-2-93 3844 06/02/93
23706

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD
JUN 2 12 20 PM '93
Helen L. Gilmore
REGISTER OF DEEDS

(9)

LIBER 843 PAGE 984

WARRANTY DEED

Entry 9

The Grantor, **MOONEY OIL CORPORATION**, a Michigan corporation, whose address is 4773 West Grand River, Lansing, Michigan 48906,

conveys and warrants to **THE TOTAL PETROLEUM MASTER TRUST**, a Delaware business trust, whose address is 900 19th Street, Denver, Colorado 80202-2492,

the following described premises situated in the City of Mt. Pleasant, County of Isabella and State of Michigan:

> Lots 1 and 4, in Block 1 of Kinney and Richmond's Addition to the Village (now City) of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, Page 95.

property known as: 815 N. Mission, Mt. Pleasant, Michigan
Permanent Property Number: 170-K05-005-461-00

AFFIDAVIT FILED

for the sum of: See Real Estate Transfer Tax Valuation Affidavit.

This conveyance is subject to the lien for taxes not yet due and payable, as well as, any and all agreements, easements or releases for public or private rights-of-way, drains, highways or utilities of record and to rights of the public over N. Mission Street and Pickard Street and further subject to the Permitted Exceptions set forth on the attached Schedule A.

Dated this 25th day of October, 1995.

Signed in presence of:

Lisa M. Stolnacke

Patricia S. Chiaro

MOONEY OIL CORPORATION, a Michigan corporation

By: Richard J. Mooney
Richard J. Mooney, President

STATE OF MICHIGAN
COUNTY OF ISABELLA
I HEREBY CERTIFY that there are no tax liens or titles held by the State or individuals on the lands described in the written instrument, and that all taxes are paid as shown by the records of this office for five years.
Steven W. Pickens
Treasurer of Isabella County

STATE OF MICHIGAN)
) ss.
COUNTY OF EATON)

The foregoing instrument was acknowledged before me this 25th day of October, 1995, by Richard J. Mooney, President of Mooney Oil Corporation, a Michigan corporation, on behalf of the corporation.

Lisa M. Stolnacke
Lisa M. Stolnacke, Notary Public
Eaton County, Michigan
My commission expires: 4/21/99

When Recorded Return To:

James W. Collier, Esq.
DYKEMA GOSSETT, PLLC
400 Renaissance Center
Detroit, MI 48243

Drafted By:

Thomas L. Lapka
HUBBARD, FOX, THOMAS,
WHITE & BENGTSON, P.C.
5801 W. Michigan Avenue
P.O. Box 80857
Lansing, Michigan 48908-0857
(517) 886-7176

j:\psc\re\doc.201\station#29

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD

Nov 13 11 47 AM '95

SHARON A. BROWN
REGISTER OF DEEDS

Exhibit A
Permitted Exceptions

#1827 815 N. Mission Rd.
Mt. Pleasant, MI

1. Right of way in favor of City of Mt. Pleasant, for the purpose of constructing a curbed radius at the intersection of BR27 and Pickard Street, dated June 10, 1980, recorded July 14, 1980, in Liber 464, Page 204

Entry 10

(2)

LIBER 843 PAGE 986

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD

Nov 13 11 48 AM '95

SHARON A. BROWN
REGISTER OF DEEDS

LEASE SUPPLEMENT NO. 10

THIS LEASE SUPPLEMENT NO. 10 (this "Lease Supplement") dated as of October 25, 1995, between HARRY E. SHAW not in his individual capacity but solely as Trustee of THE TOTAL PETROLEUM MASTER TRUST, a Delaware business trust, whose address is c/o Treasury Department, Total Petroleum, Inc., TOTAL Tower, 900 19th Street, Denver, Colorado 80202, as lessor (the "Lessor"), and Total Michigan, Inc., a Michigan corporation, whose address is c/o Treasury Department, Total Petroleum, Inc., TOTAL Tower, 900 19th Street, Denver, Colorado 80202, as lessee (the "Lessee").

WHEREAS, the Lessor is the owner of the Property described on Schedule I hereto (the "Leased Property") and wishes to lease the same to the Lessee;

NOW, THEREFORE, in consideration of the premises and the mutual agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions; Rules of Usage. For purposes of this Lease Supplement, capitalized terms used herein and not otherwise herein shall have the meanings assigned to them in Appendix A to the Participation Agreement, dated as of August 9, 1995, among the Lessee, the Lessor, Chemical Synthetic Leasing, Inc., Credit Suisse and Lease Plan North America, Inc., as Investors, Chemical Bank, as Agent, and the lenders parties thereto.

2. The Properties. Attached hereto as Schedule I is the description of the Leased Property. Effective upon the execution and delivery of this Lease Supplement by the Lessor and the Lessee, the Leased Property shall be subject to the terms and provisions of the Lease.

3. Ratification. Except as specifically modified hereby, the terms and provisions of the Lease are hereby ratified and confirmed and remain in full force and effect.

4. Original Lease Supplement. The single executed original of this Lease Supplement marked "THIS COUNTERPART IS THE ORIGINAL EXECUTED COUNTERPART" on the signature page thereof and containing the receipt of the Agent therefor on or following the signature page thereof shall be the Original Executed Counterpart of this Lease Supplement (the "Original Executed Counterpart"). To the extent that this Lease Supplement constitutes chattel paper, as such term is defined in the Uniform Commercial Code as in effect in any applicable jurisdiction, no security interest in this Lease Supplement may be created through the transfer or possession of any counterpart other than the Original Executed Counterpart.

5. GOVERNING LAW. THIS LEASE SUPPLEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAW OF THE STATE OF NEW YORK, INCLUDING SECTIONS 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW BUT EXCLUDING ALL OTHER CHOICE OF LAW AND CONFLICTS OF LAW RULES OF SUCH STATE, EXCEPT AS TO MATTERS

RELATING TO THE CREATION OF THE LEASEHOLD AND ANY SUBLEASEHOLD ESTATES HEREUNDER, AND THE EXERCISE OF RIGHTS AND REMEDIES WITH RESPECT THERETO, WHICH SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAW OF THE STATE IN WHICH SUCH ESTATE ARE LOCATED.

6. Counterpart Execution. This Lease Supplement may be executed in any number of counterparts and by each of the parties hereto in separate counterparts, all such counterparts together constituting but one and the same instrument.

7. Recordation. The Lessor and the Lessee agree that a memorandum of this Lease Supplement No. 10 shall be recorded at the Lessee's sole cost and expense as required under Section 33.7 of the Lease.

IN WITNESS WHEREOF, the parties have caused this Lease Supplement No. 10 to be duly executed and delivered as of the date first above written.

WITNESSES:

Name:

Name:

TOTAL MICHIGAN, INC.

By:
Name: DENISE K BEISEL
Title: VICE PRESIDENT

WITNESSES:

Name:

Name:

THE TOTAL PETROLEUM MASTER TRUST

By:
HARRY E. SHAW, not in his individual capacity but solely as Trustee

LIBER 843 PAGE 988

State of Michigan)
)
County of EATON) ss.

The foregoing instrument was acknowledged before me this 25 day of October, 1995, by DENISE K. BEISEL as VICE PRESIDENT of Total Michigan, Inc., a Michigan corporation and acknowledged by him to be the act of the Corporation.

Ronald Wescott
Name:
Notary Public in and for said County and State
My Commission Expires: _____

State of COLORADO)
)
County of DENVER) ss.

The foregoing instrument was acknowledged before me this 20th day of October, 1995, by Harry E. Shaw, not in his individual capacity but solely as Trustee for The Total Petroleum Master Trust, a Delaware business trust.

Dorothy J. Jamieson
Name: Dorothy J. Jamieson
Notary Public in and for said County and State
My Commission Expires: 5-11-96

This Instrument Drafted by and
After Recording Return to:

Simpson Thatcher & Bartlett
425 Lexington Avenue
New York, NY 10017
Attn: C. Tanner Rose, Esq.

33575.1

SCHEDULE 1

The land is located in the County of ISABELLA, State of Michigan, and described as follows:

Lots 1 and 4 in Block 1 of Kinney and Richmond's Addition to the Village (now City) of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, Page 95.

Entry 11

LIBER 843 PAGE 990

STATE OF MICHIGAN
COUNTY OF ISABELLA
RECEIVED FOR RECORD

Nov 13 11 49 AM '95

SHARON A. BROWN
REGISTER OF DEEDS

MEMORANDUM OF LEASE AND LEASE SUPPLEMENT

This Memorandum of Lease and Lease Supplement is made this 10 day of October, 1995, between HARRY E. SHAW, not in his individual capacity but solely as Trustee of THE TOTAL PETROLEUM MASTER TRUST, a Delaware business trust whose address is c/o Treasury Department, Total Petroleum, Inc., TOTAL Tower, 900 19th Street, Denver, CO 80202 ("Lessor") and TOTAL MICHIGAN, INC., a Michigan Corporation, whose address is c/o Total Petroleum, Inc., TOTAL Tower, 900 19th Street, Denver, Colorado 80202 ("Lessee").

RECITALS

A. Under a Lease between the Lessor and Lessee dated as of October 10, 1995 (the "Lease"), Lessor has leased to Lessee certain properties more particularly described in separate lease supplements recorded in the counties where each property is located.

B. Simultaneous with the execution of this Memorandum to Lease and Lease Supplement, Lessor and Lessee have executed Lease Supplement No. 10, (the "Lease Supplement"), whereby Lessor has leased to Lessee the property more particularly described on Exhibit A attached hereto and incorporated herein by reference (the "Property").

MEMORANDUM

1. The term of the Lease Supplement commenced on October 25, 1995 and shall terminate on August 9, 2002.

2. Lessee has certain options to purchase the Property as set forth in the Lease.

3. Upon the expiration or earlier termination of the Lease, Lessee agrees to execute and deliver to Lessor, in recordable form, a written termination of the Lease Supplement and of this Memorandum, and if Lessee fails to do so within ten days after receiving the form, then Lessor may execute a notice that the Lease Supplement has terminated on Lessee's behalf; and when recorded either that form or the notice shall have the same effect as the termination of the Lease Supplement and quitclaim by Lessee of any interest in the Property.

4. This Memorandum may be executed in any number of counterparts and by each of the parties hereto in separate

counterparts, all such counterparts together constituting one and the same instrument.

WITNESSES:

Name: Melody Egge

Name: Shari LeFkoff

THE TOTAL PETROLEUM MASTER TRUST, a Delaware business trust

By: _____
HARRY E. SHAW, not in his individual capacity but solely as Trustee

WITNESSES:

Name: _____

Name: _____

TOTAL MICHIGAN, INC., a Michigan corporation

By: _____
Name: Denise K. Bassel
Title: Vice President

State of Michigan)
)
County of EATON) ss.

The foregoing instrument was acknowledged before me this 25 day of October, 1995, by Denise K. Beisel as Vice President of Total Michigan, Inc., a Michigan corporation and acknowledged by him to be the act of the corporation.

Ronald C. Woodcock
Name:
Notary Public in and for said
County and State
My Commission Expires:_____

State of Colorado)
)
County of Denver) ss.

The foregoing instrument was acknowledged before me this 20th day of October, 1995, by Harry E. Shaw, not in his individual capacity but solely as Trustee of The Total Petroleum Master Trust, a Delaware business trust.

Dorothy J. Jamieson
Name: Dorothy J. Jamieson
Notary Public in and for said
County and State
My Commission Expires: 5-11-96

This Instrument Drafted by and
After Recording Return to:

Simpson Thatcher & Bartlett
425 Lexington Avenue
New York, NY 10017
Attn: C. Tanner Rose, Esq.

EXHIBIT A

The land is located in the County of ISABELLA, State of Michigan, and described as follows:

Lots 1 and 4 in Block 1 of Kinney and Richmond's Addition to the Village (now City) of Mt. Pleasant, according to the plat recorded in Liber 2 of Plats, Page 95.

Entry 12

11-132

LIBER 966 PAGE 927

3)

199900011432
Filed for Record in
ISABELLA COUNTY, MI
SHARON A BROWN
On 11-12-1999 At 08:37:11 am.
WARR DEED 15.00
Liber 966 Page 927 - 930

Unit No. 4312

WARRANTY DEED

STATE OF MICHIGAN §
§
COUNTY OF ISABELLA §

THE TOTAL PETROLEUM MASTER TRUST, a Delaware business Trust ("Grantor"), whose mailing address is c/o Ms. Carol Burke, Gardere Wynne Sewell & Riggs L.L.P., 1000 Louisiana, Suite 3400, Houston, Texas 77002, for and in consideration of the sum of Ten Dollars ($10.00), the receipt of which is hereby acknowledged,

HAS GRANTED, SOLD, AND CONVEYED, and by these presents does GRANT, SELL, AND CONVEY, unto TPI Petroleum, Inc. , a Michigan corporation, ("Grantee"), whose mailing address is 6000 N. Loop 1604 West, San Antonio, Texas 78249, certain real property situated in Isabella County, Michigan, Tax I.D. No. 17-000-09001-00, and more particularly described on Exhibit "A" attached hereto and, by this reference, made a part hereof, together with all buildings, improvements, and fixtures thereon.

Grantor does hereby convey the premises described above together with all rights, titles, and interests, if any, of Grantor in and to any roads, easements, streets, and rights-of-way within, adjoining, adjacent, or contiguous to the premises, and all condemnation awards, reservations, remainders, together with each and every right, privilege, hereditament and appurtenance in anyway incident or appertaining to the premises.

By this conveyance Grantor hereby terminates, and by acceptance of this deed Grantee hereby agrees to the termination of that certain Lease by and between Grantor and Grantee evidenced by that certain Memorandum of Lease dated October 10, 1995, recorded on November 13, 1995, and Lease Supplement No. 10 recorded in Liber 843, Page 990, but insofar, and only insofar as said Lease applies to this Property.

Grantor grants to the Grantee the right to make all legally feasible division(s) under Section 108 of the Land Division Act, Act No. 288 of the Public Acts of 1967. The Premises may be

located within the vicinity of farmland or a farm operation. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan Right to Farm Act.

TO HAVE AND TO HOLD the above-described Property, together with all and singular the rights and appurtenances thereto in anyway belonging, unto the said Grantee, its successors and assigns forever; and Grantor does hereby bind itself, Grantor's successors and assigns to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through, and under Grantor only, but not otherwise.

Dated to be effective as the 18th day of October, 1999.

Signed in the presence of:

Mary Kay Pupillo
NAME: Mary Kay Pupillo

Amy L. Martin
NAME: Amy L. Martin

THE TOTAL PETROLEUM MASTER TRUST,

By: Wilmington Trust Company
not in its individual capacity,
but solely as Owner Trustee

BY: _____
NAME: Denise M. Geran
TITLE: Senior Financial Services Officer

STATE OF DELAWARE §
§
COUNTY OF NEW CASTLE §

The foregoing instrument was acknowledged before me on the 15th day of October, 1999, by DENISE M. GERAN the Senior Financial Services Officer of Wilmington Trust Company not in its individual capacity, but solely as Owner Trustee of The Total Petroleum Master Trust, a Delaware business Trust, on behalf of said entity and said Trust.

Susanne M. Gula
Notary Public, State of Michigan DELAWARE

SUSANNE M. GULA
NOTARY PUBLIC
My Commission Expires November 21, 1999

When Recorded return to:	Drafted by:
c/o Ms. Carol Burke	
Gardere Wynne Sewell & Riggs, L.L.P.	TPI Petroleum, Inc.
1000 Louisiana, Suite 3400	6000 N. Loop 1604 W.
Houston, Texas 77002	San Antonio, TX 78249

This deed is exempt from the tax imposed pursuant to MSA 7.456(5)(a) and MSA 7.456(26)(a) and (s).

EXHIBIT "A"

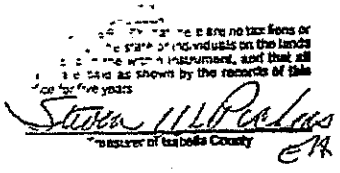
PROPERTY DESCRIPTION

UNIT 4312

The premises commonly known as 815 North Mission Road, City of Mount Pleasant, County of Isabella, and State of Michigan, and more particularly described as:

Lots 1 and 4, in Block 1 of Kinny and Richmonds Addition to the Village (now City) of Mount Pleasant, according to the plot recorded in Liber 2 of Plats, Page 95.

Tax ID No.: 17-000-09001-00



Entry 13

11433 LIBER 966 PAGE 931

STATE OF MICHIGAN
COUNTY OF ISABELLA
I HEREBY CERTIFY that there are no tax liens or titles held by the state or individuals on the lands described in the within instrument, and that all taxes are paid as shown by the records of this office for five years.
Steven W Fisher
Treasurer of Isabella County

199900011433
Filed for Record in
ISABELLA COUNTY, MI
SHARON A BROWN
On 11-12-1999 At 08:37:49 am.
WARR DEED 11.00
Liber 966 Page 931 - 932

SPECIAL WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

That TPI PETROLEUM, INC., a Michigan corporation, whose address is 6000 N. Loop 1604 W., San Antonio, Texas 78249-1112 ("Grantor") conveys and warrants to OLSON FIRESTONE SERVICE, INC., a Michigan corporation, whose address is 704 East Pickard, Mount Pleasant, Michigan 48858 ("Grantee"), the following described premises situated in the City of Mount Pleasant, County of Isabella, and State of Michigan, and more particularly described as:

> Lots 1 and 4, in Block 1 of Kinny and Richmonds Addition to the Village (now City) of Mount Pleasant, according to the plot recorded in Liber 2 of Plats, Page 95,

AFFIDAVIT FILED

commonly known as 815 North Mission Road, Mount Pleasant, Michigan, together with all and singular the hereditaments and appurtenances thereto belonging or in anywise appertaining, for the sum of $10.00* The Property is hereby restricted for a period of 40 years from the date of this deed to prohibit the Property being used for the sale or storage of hydrocarbon motor fuels, or as a convenience store. The property is further restricted for Commercial use only and by accepting this deed Grantee agrees never to drill a water well on the Property.

* and other valuable consideration, see Affidavit attached.

Grantor has not made and does not make any representations, warranties or covenants of any kind or character whatsoever, whether express or implied, with respect to the quality or condition of the Property, the suitability of the Property for any and all activities and uses which Buyer may conduct thereon, compliance by the Property with any laws, rules, ordinances, or regulations of any applicable governmental authority or habitability, merchantability, or fitness for a particular purpose, and specifically, Grantor does not make any representations regarding hazardous waste, as defined by the Solid Waste Disposal Act and the regulations adopted thereunder, or the U.S. Environmental Protection Agency regulations, or the disposal of any hazardous waste or any other hazardous or toxic substances in or on the Property. Except for the warranties expressly contained herein, and except for Grantor's remediation commitments the Property is hereby sold, transferred, and assigned to Grantee "As Is" and "With All Faults."

TO HAVE AND TO HOLD the above-described Property, together with all and singular the rights and appurtenances thereto in anywise belonging, unto the said Grantee, its successors, and assigns forever, subject to all outstanding minerals, reservations, ordinances, and rights-of-way, if any; and taxes and assessments which accrue and fall due and payable after the date of title transfer.

Dated to be effective _____, 1999.

Signed in the presence of:

Shirley Myers

Grantor:

TPI PETROLEUM, INC.

BY: _____
Vice President

STATE OF TEXAS §
§
COUNTY OF BEXAR §

The foregoing instrument was acknowledged before me this 5th day of November, 1999 by KK Eaton, a Vice President of TPI PETROLEUM, INC., a Michigan corporation, on behalf of the corporation.

R. KEVIN KING
Notary Public
State of Texas
My Comm. Exp. 11/19/2000

R. Kevin King
Notary Public, State of Texas

County Treasurer's Cert.	City Treasurer's Cert.

When Recorded Return To:	Send Subsequent Tax Bills to:	Drafted by: J. L. Bass
Olson Firestone Service, Inc. 704 East Pickard Mount Pleasant, MI 48858	_____ _____	TPI Petroleum, Inc. P. O. Box 696000 San Antonio, Texas 78269-6000

Tax Parcel #: _____
Recording Fee: _____
File Number: _____

State Transfer Tax: _____
County Transfer Tax: _____

Entry 14

LIBER 996 PAGE 736

200000008862
Filed for Record in
ISABELLA COUNTY, MI
SHARON A BROWN
On 10-06-2000 At 12:24:57 pm.
NOTICE 13.00
Liber 996 Page 736 - 738

200000008862
COMPLIANCE INC
TRAVERSE CITY,MI-SEE ENVELOP

CORRECTIVE ACTION NOTICE TO REGISTER OF DEEDS

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - STORAGE TANK DIVISION

This information and form is required under Sections 21310a(1) and 21316 of Part 213, Leaking Underground Storage Tanks (LUST), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Failure to comply with the provisions of this Act may result in civil fines not to exceed $10,000 for each day the violation continues or failure to comply continues.

Instructions: Use this form for the Notice of Corrective Action to be filed with the Register of Deeds. This form is needed when the corrective action activities at a site result in a final remedy that relies on Tier I Commercial or Industrial criteria. If corrective action is based on the use of institutional controls regarding off-site migration of regulated substances, wait for Storage Tank Division (STD) approval before recording this notice with the register of deeds for contamination that has migrated or will migrate off-site. If the institutional control is for on-site contamination, the owner/operator may proceed with recording this notice with the register of deeds. In all cases, submit a copy of this notice and proof of recording with the Closure Report (EQP 3843) to the appropriate STD District Office listed on the back of the Closure Report Cover Sheet. This form must be completed in its entirety.

The owner/operator identified below has prepared a corrective action plan requiring land use controls. The corrective action plan was developed as a result of a release from an underground storage tank(s) and was prepared pursuant to the provision in Section 21310a(1) of NREPA. Regulated substances were discovered during the investigation and/or removal of underground storage tank(s) (USTs). This Notice of Corrective Action is filed with the County Register of Deeds and covers the land identified in the following, and more fully described in Attachment A, attached. ***(Attach a legal property description as Attachment A for the land where the institutional controls would apply, and a map of the property).***

Owner/Operator: TPI Petroleum, Inc.

Release Date(s): February 23, 1999

County where deed is registered: Isabella

Common description of land, township/city, County: 815 North Mission, Mount Pleasant, Isabella County

The land use that was the basis of corrective action at this site is as follows:

☒ Commercial ☐ Industrial

If there is a proposed change in the land use at any time in the future, that change may necessitate further evaluation of potential risks to the public health, safety, and welfare and to the environment. The Department of Environmental Quality shall be contacted regarding any proposed change in the land use.

This notice is being filed by the property owner or with the express written permission of the property owner.

The filing of this notice is consistent with the provisions of Section 21310a(1) of Part 213. The corrective action plan cited above will be maintained on file at the STD District Office located at

503 North Euclid Avenue, Suite 1, Bay City, MI 48706

I hereby attest to the accuracy of the statements in this document and all attachments. I further certify that the language on this form has not been modified in any way.

[signature] 10-26-99
Legal Titleholder or Authorized Representative's Signature — Date

R.S. Beadle
Print Legal Titleholder or Authorized Representative's Name

IN WITNESS WHEREOF, the said Owner of the above described property has caused the Institutional Control to be executed on the 26 day of October, 1999

[signature] [signature]
Witness — Witness

O. Shay Wideman — Tim George
Print Witness' Name* — Print Witness' Name*

* The notary shall not serve as a witness.

Subscribed and sworn to me before this 26 day of October, 1999. Isabel Lovil
Notary Public

Bexar (Insert County) County, Texas (Insert State)

My Commission Expires: 1/20/2002

ISABEL LOVIL

Drafted by:
Compliance, Inc.
Company Name

Jim Rossi
Print Name of Drafter

223 Lake Avenue, Traverse City, MI 49684
Company Address

EQP3853 (REV 5/98)

LIBER 996 PAGE 739

Attachment A

Legal Property Description
TPI # 4312

KINNEY & RICHMOND ADDITION
LOTS 1 AND 4, BLOCK 1

Entry 15

LIBER 996 PAGE 739

200000008863
Filed for Record in
ISABELLA COUNTY, MI
SHARON A BROWN
On 10-06-2000 At 12:27:16 pm.
RESTRICTION 15.00
Liber 996 Page 739 - 742

200000008863
COMPLIANCE INC
TRAVERSE CITY, MI-SEE ENVELOP

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - STORAGE TANK DIVISION

RESTRICTIVE COVENANT

This information and form is required under Sections 21310a(2) and 21316 of Part 213, Leaking Underground Storage Tanks (LUST), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Failure to comply with the provisions of this Act may result in civil fines not to exceed $10,000 for each day the violation continues or failure to comply continues.

INSTRUCTIONS: Use this form for filing the restrictive covenant with the register of deeds. This form is needed when the corrective action is based on a restrictive covenant for institutional controls. This form is not needed if an alternate mechanism is approved by the Department of Environmental Quality (Department) pursuant to Section 21310a(3) and 21310(4) of Part 213. If corrective action is based on the use of institutional controls regarding off-site migration of regulated substances, wait for Storage Tank Division (STD) approval before recording the Restrictive Covenant with the register of deeds for contamination that has migrated or will migrate off-site. If the institutional controls are for on-site contamination, the owner/operator may proceed with recording the Restrictive Covenant with the register of deeds. In all cases, submit a copy of the Restrictive Covenant and proof of recording with the Closure Report (EQP 3843) to the appropriate STD District Office listed on the back of the Closure Report Cover Sheet. This form must be completed in its entirety.

The below listed owner/operator has implemented a corrective action plan requiring institutional controls in the form of a restrictive covenant. The corrective action plan was developed as a result of a release from a Leaking Underground Storage Tank(s) (LUST) and was prepared pursuant to the provisions in Section 21310a(2) of Part 213. Regulated substances were discovered during the investigation and/or removal of Underground Storage Tanks (USTs). The corrective action plan cited above will be maintained on file at the STD District Office located at

503 North Euclid Avenue, Suite 1, Bay City, MI 48706

This restrictive covenant is filed with the County Register of Deeds and covers the land identified in the following, and more fully described in Attachment A, attached. (*Attach a legal property description as Attachment A for the land where the restrictive covenant would apply, and a survey map of the areas addressed by this restrictive covenant.*) The restrictive covenant defines the areas addressed by the corrective action plan and the scope of any land use or resources limitations. The survey defining the areas addressed by the corrective action plan is attached. (*Describe the scope of any land use or resource use limitations.*)

Ground water use at the site is restricted.

The restrictive covenant is being filed by the below listed legal titleholder or with the express written permission of the legal titleholder. (*Attach permission statement from the legal titleholder if he/she is not signing this document.*)

Owner/Operator implementing the corrective action plan: TPI Petroleum, Inc.

Release Date(s): February 23, 1999

County where deed is registered: Isabella

Common description of land, township/city, County: 815 North Mission, Mount Pleasant, Isabella County, Michigan

Now Therefore (Legal Titleholder Name and Address) LIBER 996 PAGE 749

TPI Petroleum, Inc ., P.O. Box 696000, San Antonio, Texas 78269-6000

(hereinafter referred to as the "titleholder"), hereby imposes restriction on the property and covenants and agrees that:

1. The Titleholder shall restrict activities on the property that may interfere with corrective action, operation and maintenance, monitoring, or other measures necessary to assure the effectiveness and integrity of the corrective action.

2. The Titleholder shall restrict activities that may result in exposure to regulated substances above levels established in the corrective action plan.

3. The Titleholder shall prevent a conveyance of title, an easement, or any other interest in the property from being consummated without adequate and complete provision for compliance with the corrective action plan and prevention of exposure to regulated substances described in item 2 above.

4. The Titleholder shall grant to the Department of Environmental Quality (Department) and its designated representatives the right to enter the property at reasonable times for the purpose of determining and monitoring compliance with the corrective action plan, including but not limited to the right to take samples, inspect the operation of the corrective action measures, and inspect records.

5. Soil shall not be removed from the property described herein, unless it is characterized to determine if it can be relocated without posing a threat to the public health, safety, welfare or environment in the new location.

6. The state may enforce the restrictions set forth in the covenant by legal action in a court of appropriate jurisdiction.

The restrictions and other requirements described in this Restrictive Covenant shall run with the land and be binding to the titleholder's successors, assigns, and lessees or their authorized agents, employees or persons acting under their direction or control. The restrictions shall apply until the Department determines that regulated substances no longer present an unacceptable risk to the public health, safety or welfare or to the environment. A copy of this Restrictive Covenant shall be provided to all heirs, successors, assigns, and transferees.

This Restrictive Covenant shall not be amended, modified or terminated except by a written instrument executed by and between the Titleholder at the time of the proposed amendment, modification, or termination, and the Department. Within five (5) days of executing an amendment, modification or termination of the Restrictive Covenant, the Titleholder shall record such amendment, modification or termination with the County Register of Deeds, previously named, and within five (5) days thereafter, the Titleholder shall provide a true copy of the recorded amendment, modification or termination to the Department.

If any provision of this Restrictive Covenant is also the subject of any laws or regulations established by any federal, state or local government, the stricter of the two standards shall prevail.

The undersigned person, if executing this Restrictive Covenant on behalf of the Titleholder, represents and certifies that they are duly authorized and have been fully empowered to execute and deliver this Restrictive Covenant.

I hereby attest to the accuracy of the statements in this document and all attachments. I further certify that the language on this form has not been modified in any way.

R.S. Beadle
Legal Titleholder or Authorized Representative's Signature

10-26-99
Date

R.S. Beadle
Print Legal Titleholder or Authorized Representative's Name

LIBER 996 PAGE 741

IN WITNESS WHEREOF, the said Titleholder of the above described property has caused the Restrictive Covenant to be executed on the 16 day of October, 1999.

Signed in the presence of:

Witness

Witness

C. Sinar Widman
Print Witness' Name*

Tim George
Print Witness' Name*

* The notary shall not also serve as a witness.

Subscribed and sworn to me before this 26 day of October, 1999. Isabel Lovil
Notary Public

Bexar (Insert County) County, Texas (Insert State)

My Commission Expires: 1/20/2002

ISABEL LOVIL
Notary Public, State of Texas
My Commission Expires 01/20/2002

Drafted by:

Compliance, Inc.
Company Name

Jim Rossi
Print Name of Drafter

223 Lake Avenue, Traverse City, MI 49684
Company Address

LIBER 996 PAGE 742

Attachment A

Legal Property Description
TPI # 4312

KINNEY & RICHMOND ADDITION
LOTS 1 AND 4, BLOCK 1

ATTACHMENT D

Final Assessment Report

Final Assessment Report

Total #4312
815 N. Mission Road
Mt. Pleasant, 48858
Isabella County

ID: 0-016792

VOLUME 1 of 2

EnviroSolutions℠

EnviroSolutions, Incorporated

38115 Abruzzi Drive
Westland
MI 48185
734.641.2700
734.641.2775 Fax
info@envirosolutionsinc.net
www.envirosolutionsinc.net

March 6, 2007

Sent via Certified Mail
70010360000384194378

Larry Engelhart
Environmental Quality Analyst
MDEQ
503 N. Euclid Avenue
Suite 9
Bay City, MI 48706-2965

RE: Final Assessment Report
Facility 0-0016792
Former TPI#4312
815 North Mission Road, Mt. Pleasant, MI 48858

Dear Mr. Engelhart:

On behalf of Michigan Reutilization, LLC (MRLLC), EnviroSolutions, Inc., is submitting the attached Final Assessment Report (FAR). As we discussed during our pre-FAR meeting early in 2006, we are requesting a recap meeting regarding the content and conclusion of the FAR. Subsequently, we are requesting a formal response from MDEQ.

It is MRLLC's intention to perform corrective action at this facility in a timely manner and subsequently submit an appropriate Closure Report. We look forward to working with MDEQ on this project until no further action is obtained. I will contact you within two weeks to schedule a meeting. Please contact me at (734)641-2700, if you have any questions.

Sincerely,
EnviroSolutions, Incorporated

Roy Gantt, CPG
Principal Geologist

Attachment: Final Assessment Report Facility 00-016792, Former Total Petroleum Station 4312

DEQ

RECEIVED

MAR - 8 2007

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – REMEDIATION & REDVELOPMENT DIVISION
PO BOX 30426, LANSING, MI 48909-7926, Phone 517-373-9837, Fax 517-373-2637, E-mail rpf@michigan.gov

LEAKING UNDERGROUND STORAGE TANK FINAL ASSESSMENT REPORT COVER SHEET

Remediation & Redevelopment Division
MDEQ Saginaw Bay District Office

INSTRUCTIONS: COMPLETION OF THIS REPORT WITH ALL APPLICABLE INFORMATION IS MANDATORY pursuant to Part 213, Section 21316a of 1994 PA 451, as amended (PA 451). The Certified Underground Storage Tank Professional (CP) MUST sign below. Failure to submit a report within the stated time period may result in administrative penalties as provided for in Part 213, Section 21313a of PA 451. Please return this completed report and associated attachments to the appropriate RRD district office. See form EQP4410 for a complete list of RRD district offices.

FACILITY NAME: Former Total Station 4312			FACILITY ID NUMBER: 00-016792
STREET ADDRESS: 815 North Mission Road	CITY: Mt. Pleasant	STATE: MI	ZIP: 48858
DATE(S) RELEASE(S) DISCOVERED: 2/23/99	CONFIRMED RELEASE NUMBER(S):C-0163-99		
OWNER/OPERATOR (O/O) NAME: Michigan Reutilization, LLC			
O/O STREET ADDRESS: One Valero Way	CITY: San Antonio	STATE: TX	ZIP: 78249
CONTACT PERSON: Shay Wideman	PHONE NUMBER: (210)345-4663		

ANSWER ALL QUESTIONS (DO NOT LEAVE BLANKS):

1. Michigan RBCA Site Classification (1-4): 1

2. Substance(s) released: ☒ Gasoline ☐ Diesel ☐ Ethanol E-10___ E-85___ ☐ Other: _____

3. Corrective Action proposed? Soil: _____ Groundwater: Chemical Oxidation

4. Proposed Corrective Action includes: In-situ injection? ☒YES ☐NO Request for mixing zone determination? ☐YES ☒NO
Groundwater not in an aquifer determination? ☐YES ☒NO Institutional controls regarding off-site migration? ☒YES ☐NO

5. Proposed Institutional Controls: ☐ None ☒ Notice of Corrective Action ☒ Restrictive Covenant ☐ Ordinance
☐Other _____ Are Proposed Institutional Controls: ☒ On-site ☒ Off-site (rights-of way) (property owners)

6. Has contamination migrated off-site above Tier 1 Residential RBSLs? ☒YES ☐NO
If YES, have off-site impacted parties been notified per Section 21309a(3) of Part 213? ☒YES ☐NO

7. Predominant groundwater flow direction: North Depth to groundwater: 8 to 11 feet

8. Free product present: a. Currently? ☒YES ☐NO If YES, total gallons recovered since last report: .25 gal.
b. Previously? ☒YES ☐NO If YES, total gallons recovered to date: 31,934.50 gal. FP and Water

9. Since last report: cubic yards of soil remediated 0 gallons of groundwater remediated 0

10. Totals to date: cubic yards of soil remediated 100 Gallons of groundwater remediated 3,754.41 gal. FP and water

11. Have vapors been identified in any confined spaces (basement, sewers, etc.)? ☐YES ☒NO

12. Drinking water supply affected as a result of a release from this facility? Currently: ☐YES ☒NO Previously: ☐YES ☒NO
Indicate type and # of wells impacted: ☐ Private, # = _____ ☐ Public Type II/III, # = _____ ☐ Municipal, # = _____

13. Estimated distance and direction from point of release to nearest: Private well: 600 ft. N. Municipal well: >2 Miles South
Surface water/wetland/storm sewer: Storm Adjacent to N. Is site within a wellhead protection zone? ☒YES ☐NO

14. Maximum MTBE concentration found in groundwater to date is 640 ppb in MW# 6 on 12/20/2000

CERTIFICATION OF REPORT COMPLETION

I, the undersigned Certified Professional (CP), on behalf of EnviroSolutions, Inc. certify on this 6th day of MARCH, 2007 that I provided direct oversight of all corrective actions reported herein that were undertaken at this facility while retained as CP, and confirm that the corrective actions have been completed in compliance with statutory requirements, department guidance and policy applicable at the time the work was completed. I attest to the best of my knowledge and belief that the statements in this document and all attachments are true, accurate, and complete. Pursuant to Section 21324 of Part 213, Section 21548 of Part 215, and Rule 324.21514(3) I understand that any false or misleading information contained in this document and all attachments may constitute fraud and may result in the initiation of formal enforcement proceedings I ncluding but not limited to revocation of QC/CP certification, permanent suspension from qualification as a QC/CP, and/or civil fines.

CP Original Signature - **(REQUIRED)** — Date: 3/6/07

Roy G. Gantt
PRINT QC PROJECT MANAGER'S NAME

Gregory Kernosek
PRINT CP's Name

EnviroSolutions, Inc.
NAME OF QUALIFIED CONSULTING FIRM

CP ID # 182

QC ID: Z00070

38115 Abruzzi Dr., Westland, MI 48185
Address

PHONE: (734) 641-2700 FAX: (734)641-2775

Instructions - Utilize the following checklist to ensure that all required information is provided in the Final Assessment Report (FAR). Include this checklist as the table of contents. The order in which the information is provided is at your discretion. Each page of the report (including the cover sheet, table of contents, appendices, figures, etc.) should be consecutively numbered. The location column should be completed with the appropriate page number for each item. You may reference previously submitted materials by specifying the location within that document. Maps, tables, figures, etc. should be combined as appropriate.

All information required by Part 213 to be included in the FAR **must** be provided, and all sections of the report must be completed. If any items are not applicable to the site, provide a justification regarding the absence of this information in the appropriate section of the report.

Refer to applicable Operational Memoranda and guidance materials available from the RRD's homepage www.michigan.gov/deqrrd.

If an Initial Assessment Report (IAR) has not been submitted for this release, provide all required information from the IAR not included below.

Section	Table of Contents	Page

1.0 REPORTING AND RESPONSE TO RELEASES INVOLVING FREE PRODUCT

If free product has not been discovered, then proceed to Section 2.0.

A. Indicate whether free product has been discovered subsequent to the submission of the IAR. — Page 11-14

B. Describe initial response actions performed at this site to address the presence of free products specified in Sections 21307(2)(c) and (f), and (3)(b) and (c), 21308a(1)(b)(*xviii*). — Page 11-14

C. Attach the RRD Free Product Recovery Status Report (EQP 3850). — App. C: Tab 3

D. Include a schedule for subsequent Free Product Report submittals. — Page 14

2.0 SITE CHARACTERIZATION INFORMATION

2.1 SCALED SITE MAPS

A. Provide a scaled area map (or maps) which includes the following:

1. Site boundaries in relation to the surrounding area and the nearest major roads. — App. A Fig 2
2. Location and depth of nearby underground sewers and utility lines. — App. A: Fig's 1 and 1A
3. Location of nearby surface waters or wetlands. — App. A: Fig 1A
4. Location and screened depth of all off-site wells (municipal, residential, production, irrigation, etc.) within two years groundwater travel time of the property line, which may be dependent on the pumping rates of the identified well(s). — App. A: Fig 1A
5. Location of all nearby delineated well-head protection areas.

B. Provide a scaled site map (or maps) which includes the following:

1. Location of fill ports, piping, dispensers, and other pertinent system components for all UST systems currently or formerly at the facility (*prior to excavation if tanks have been removed*). — App. A: Fig 2
2. Location of the release and the component of the LUST system from which the release occurred. — App. A: Fig 2 Page 10
3. Location of adjacent buildings, roadways, paved areas, or other structures. — App. A: Fig 1 and 2
4. Location of all on-site wells and screened intervals. — App. A Fig 7
5. Location of soil, groundwater, surface water, sediment, or air samples, as applicable. — App. A Fig 4, 4A, 5A, 5B
6. Excavation dimensions and sample locations if applicable. — App. A: Fig 2

2.2 SCALED CROSS-SECTIONAL DIAGRAMS

A. Provide scaled cross-sectional diagrams of buried utility corridors, including the pipe diameter, the type of backfill, and the trench depth. — App. A: Fig 5A,5B

B. Provide scaled cross-sectional diagrams depicting the soil lithology and the contaminant distribution, including sampling intervals and boring depths. — App. A: Fig 5A,5B

C. Provide scaled cross-sectional diagrams depicting the site hydrogeology, including the groundwater potentiometric surface, the monitoring well screened intervals, and sampling intervals. — App. A: Fig 5A,5B

2.3 DELINEATION OF THE EXTENT OF CONTAMINATION

Indicate whether additional site assessment activities were conducted subsequent to the submission of the IAR. If so, describe which environmental media were investigated (e.g., soil, groundwater, surface water, air). — Pages 10-15

A. Describe the assessment activities conducted. Indicate whether the Work Plan was implemented as outlined in the IAR. If not, describe any changes made, and provide a justification. — Page 14 – 15

2.4 SOIL CONDITIONS AND CHARACTERISTICS

A. Describe the soils encountered in the vadose zone. — Page 18

B. Describe any soil contamination which has been detected. — Page 18-21

B. Describe any soil remediation or disposal activities performed subsequent to submittal of the last report, including the total volume of soil remediated or disposed to date. Indicate the disposal location, and provide proof of disposal (e.g., invoices, not load tickets). — Page 10-12

C. Provide a site diagram which depicts the horizontal and vertical extent of on-site and off-site soil contamination. Include the maximum concentrations and sample depths. — App. A: Fig 4, 4A

D. Provide the volume of impacted soil remaining in the vadose zone. — Page 13

F. Provide a table with field screening and laboratory data showing the results of all soil sampling performed to date for the required parameters. <u>The RRD may request copies of the laboratory data sheets, chain-of-custody forms, and all available QA/QC information</u> The table should include the following: — App. B: Table 2, 2B, 2C

1. Sample ID
2. Sample Depth
3. Date of collection
4. Dates of extraction and analysis
5. Method Detection Limits
6. Analytical method or field screening instrument

B. Provide a justification for this classification. Identify the current conditions that are the basis of the classification.

C. Indicate whether the site classification has changed since the submission of the IAR.

4.0 RESULTS OF THE RBCA EVALUATION

4.1 EXPOSURE PATHWAY CHARACTERIZATION

A. Identify and describe the following (Figure 2, Exposure Scenario Evaluation Flowchart, provided in the *ASTM RBCA E 1739-95*, may be utilized):

1. Potential source(s)
2. Potential transport mechanism(s)
3. Potential exposure route(s)
4. Potential receptor(s)

B. Indicate which pathways are newly identified or have significantly changed since the submission of the IAR. Describe these pathways and any potential impact on the selection of exposure route(s) and potential receptors for this RBCA evaluation relative to the RBCA evaluation included in the IAR.

C. List each possible exposure pathway(s) for each land use and sensitive habitat (if applicable) for the site. Provide an explanation for eliminating any pathways.

NOTE: A complete pathway must include three necessary elements:

1) a source (e.g., contamination);
2) a mechanism by which the contamination can become available to result in exposures at the source or via migration to other locations (e.g., free product and contaminated groundwater movement along a buried utility corridor); and
3) an individual who may come into contact, ingest, or inhale the contamination at the point of exposure (e.g., a utility maintenance worker digging to repair the line).

Examples of a complete pathway include:

1) inhalation of impacted soils by an on-site construction worker
2) impacted soils leaching into potable ground water and being used by a nearby resident for drinking and bathing
3) inhalation of vapors resulting from the migration of free product by a neighboring industrial worker
4) impacted groundwater discharging to wetlands.

4.2 OPTIONAL TIER II OR TIER III EVALUATION

A. Indicate whether a site-specific Tier II or Tier III evaluation has been conducted for this site.

B. If applicable, identify and justify where alternate assumptions or site-specific information were used in place of the default assumptions .

NOTE: If a Tier II evaluation was performed and described in the IAR, explicitly indicate where different assumptions or site-specific information were used in this Tier II or Tier III evaluation and why the change was justified.

6.2 AIR QUALITY MONITORING

Describe the ambient or indoor air quality monitoring that will be conducted during the implementation of the corrective action and include the following: Page 47

1. Air sampling locations
2. Analytical parameters to be monitored
3. The action level for each parameter, and the basis for the action level
4. The monitoring device(s) to be used
5. The monitoring frequency
6. The procedure that will be followed if the action level(s) is/are exceeded

6.3 OPERATION AND MAINTENANCE

Attach the treatment system Operation and Maintenance (O&M) plan including the information required by Section 21309a(2)(b). Page 48

6.4 PERFORMANCE MONITORING

Page 48-49

A. Identify the environmental media to be monitored during the corrective action and indicate whether the monitoring needs to include off-site areas.

Page 48

B. Attach the performance monitoring plan, including the information required by Section 21309a(2)(c)(*i*), (*iii-xii*).

Page 48-49

C. List the indicator parameters for the performance monitoring.

NOTE: The RRD must be notified immediately if ineffective corrective action is indicated by monitoring activities.

6.5 SCHEDULE FOR IMPLEMENTATION OF THE CORRECTIVE ACTION

Attach the schedule for implementing the corrective action which should include the following: Page 50

1. The proposed corrective action start date
2. The dates of key interim milestones (specify)
3. Dates for submittal of the O & M/Performance Monitoring reports. The frequency of reporting should be discussed with the RRD Project Manager.
4. The proposed corrective action completion date
5. The expected performance monitoring/verification sampling completion date

6.6 NOTICES AND RESTRICTIONS

If the corrective action plan does not require the use of institutional controls to restrict land or resource use, then proceed to Section 6.7.

1.0 INTRODUCTION

EnviroSolutions, Inc. (ESI) was retained by Michigan Reutilization, LLC (MRLLC), to investigate subsurface conditions at former Total Station #4312, located at 815 North Mission Street, Mt. Pleasant, Michigan (Facility ID 0-016792) (the **Site**). Please see Appendix A: Figures – Figure 1, **Site** Location Map. ESI is the third environmental consultant of record to perform investigation, remediation and reporting for the **Site**. Compliance, Inc. (Compliance) was the initial consultant of record from February 1999 until January 2004. NESA and Associates, Inc. (NESA) became consultant of record in January 2004. ESI began investigation of the **Site** release during the month of January 2006. ESI's scope was to define the vertical and horizontal extent of adsorbed and dissolved hydrocarbon impact, establish a feasible corrective action plan (CAP), and author a final assessment report (FAR) associated with unleaded gasoline confirmed release C-0163-99.

The **Site** is currently owned by Total Petroleum, Inc. (Total Petroleum) as documented on Michigan Department of Environmental Quality (MDEQ) Storage Tank Facilities List. Please refer to MDEQ Storage Tank Facility List, *Total Station #4312*: Appendix C; Tab 1. It is ESI's understanding the **Site** building and canopy have been razed and the underground storage tanks (USTs), associated piping, and control systems have been removed from the property. There are no USTs or associated piping presently located at the **Site**.

Four registered USTs, which were installed at the **Site** in April, 1976, are documented as removed and disposed by Total Petroleum on February 23, 1999. The USTs were located within two tank farms. The southeastern tank farm previously contained two 6,000 gallon capacity USTs, and one 12,000 gallon capacity UST. A second tank farm containing one 6,000 capacity UST was formerly located at the northwestern portion of the property. All USTs were reported to contain gasoline. Please see Appendix A: Figures –Figure 2, **Site** Layout Map. Compliance notes on the MDEQ release reporting form (EQP3826), that the release was reported based on vapors identified in soil during removal of one of the 6,000 gallon capacity USTs located within the southeastern tank farm. The release, as documented, was from the bottom of the USTs. Please see Compliance, Inc., *Confirmed Release Report; February 23, 1999*: Appendix C; Tab 2.

The findings, as a result of ESI's investigation in conjunction with former consultants' investigative findings have been used to develop this Final Assessment Report (FAR).

Facility ID Number: 0-0016792
Release Number(s): One release #C-0163-99
Release Time and Date: 2/23/99 at 10:30 a.m.
Initial Assessment Report (IAR) Date: 5/24/99 – Compliance, Inc.
Free Product Discovery Date and Time: 2/23/99 at approximately 11:00 a.m.

2.0 SUMMARY OF CORRECTIVE ACTIONS

2.1 Free Product Discovery and Removal

Free Product was discovered on February 23, 1999, during UST removal activities. As noted by Compliance, one-eighth to one-quarter inch of free phase product (free product) was noted within the southeastern tank excavation. Please refer to Compliance, Inc., *Final Assessment Report; March April 4, 2000* (a document of record with MDEQ), which discusses free product abatement measures from February 1999 through March 2000. The following is a summary of free product abatement activities:

February 1999

- Field screening of ambient air within subsurface utility corridors adjacent to the **Site** via man-ways with a photoionization device. No detectable vapors were noted above background during this utility survey.
- Three steel USTs and piping were removed from service from the southeastern tank farm and one steel UST was removed from a tank farm at the northwestern portion of the property.
- One monitor well (MW-4) was installed within the former southeastern tank excavation.
- Documents submitted to MDEQ by Compliance report soil from the southeastern and northwestern tank farms (excavations) was placed back in the excavations during tank removal activities.
- Soil confirmation samples were not collected from the excavations or piping runs at time of UST removal.
- One soil sample was obtained from beneath each of the seven former dispenser islands (SS-1 through SS-7).

April 1999

- Four soil borings (SB-1 through SB-4) were installed. Four monitor wells were installed (MW-1 through MW-4).

May 1999

- One-half gallon of product was noted within MW-2, located approximately 60 feet north of the former southeastern UST cavity and directly beneath the former northeastern dispenser.

July 1999

- One-hundred cubic yards of impacted soil surrounding MW-2 were removed and disposed. One-thousand- five-hundred gallons of impacted groundwater and free product were removed and disposed from the excavation surrounding MW-2. The excavation was backfilled with clean sand. Confirmation soil sampling was not performed at this time.

2000 - Present

- Free product was identified in MW-3 in March 2000.
  Product was identified within MW-10 and MW-11 (installed March 2000) for the first time in September, 2000. From product discovery date through September 20, 2000, 1,503 gallons of product were removed from MW-2, MW-3, MW-10 and MW-11.

A Multi-Arrayed Vacuum Recovery System (MAV System) was installed and became operational on September 21, 2000. The purpose of the MAV system was to promote aggressive removal of free product. The MAV System was installed with three vacuum points located at the northwestern excavation (north of MW-3) and three vacuum points located near MW-2 (area where 100 cubic yards of soil was excavated). All vacuum well points were reported to be set at 13 feet below ground surface (bgs). Please see Appendix A: Figures –Figure 4A, Soil Analytical Concentration Map, Expanded View, which notes the layout of the MAV System.

On September 21, 2000, 1,250 gallons of product and water was removed from the **Site** via the MAV System. The MAV System reportedly removed a total of 34,533 gallons of water/dissolved hydrocarbons and free product from the **Site** from September 2000 through December 2003. Although the MAV System has not been operational since December 2003, documentation by Compliance supports their position that the remediation system was effective. Please see Appendix B: Tables – Table 5, Groundwater Analytical Time Series. Measured product thickness was greater than 20 inches in some locations prior to MAV System implementation as reported by Compliance. The MAV System reduced measured product thickness to non-detect in all wells for the 1st through 3rd quarters of 2004. However, the absence and subsequent reappearance of product may be attributed to groundwater fluctuations as reported by others (rebounding and groundwater gradient changes).

The MAV System was effective in product and dissolved hydrocarbon constituent removal, although coverage was limited to two discrete locations of the **Site.** The area where product was first observed (southeastern excavation) was documented as influenced by the MAV System. ESI installed MW-22 and MW-28 within the vicinity of MW-4 (southeastern excavation), on July 11, 2006 to obtain additional subsurface information from within the former excavation. One of the purposes for the investigation near MW-4 was to evaluate for the presence of Csat soil and free product. ESI did not encounter Csat soil during drilling/sampling operations and free product was not noted during drilling or groundwater gauging activities at MW-22 and MW-28 (within the vicinity of MW-4). Based on ESI's study (discussed later within this report), the presence of

free product and Csat soil within the former southeastern UST excavation has been ruled out.

By applying US EPA document: *How to Effectively Recover Free Product at Leaking Underground Storage Tank Sites: A Guide for State Regulators (EPA 510-R-96-001), September 1996*, we can estimate the current free product plume to a limited degree by evaluating and measuring known product impacted locations and known product free locations. Historical product free locations define the product free zone. The product free zone is defined by MW-1, MW-13, MW-8, MW-7, MW-6, MW-5, MW-24, MW-23 and MW-25. MW-8, MW-7 and MW-6 are down gradient of groundwater flow direction. These three down gradient sentential wells were installed on 7/20/99 and are reliable free product monitors.

Most recently, free product has been noted in MW-2 (7/26/06) .03 feet thick, MW-11 (12/7/05) .16 feet thick, MW-20 (12/7/05) .11 feet thick, and MW-21 (12/7/05) .11 feet thick.

The estimated free product plume was determined by interpolation of data from historical clean wells and wells where product has recently been noted. Other factors determining the estimated free product extent are soil lithology and groundwater gradient. The relatively flat groundwater gradient noted at the **Site** and high permeable soils within the impacted zone (medium to coarse sands) tend to create a flatter and broader free product plume. Utilizing these conservative estimates, the free product plume, based on interpolation, can be seen in Appendix A: Figure 3; Estimated Horizontal Extent of Free Product Map.

Calculations indicate the initial free product plume encompassed an area approximately 10,000 square feet. After remediation, the free product plume area has been reduced to approximately 3,700 square feet; a reduction of approximately 63%. The product plume may, however, be two individual plumes; one sourced from the former northeastern dispenser area and the other sourced from the former northwestern UST cavity. Specific data between the two product point sources will be collected during the remediation phase of the project to further refine the lateral distribution of the free product plume.

MW-10, located approximately 130 feet north of the former northwestern UST cavity (source area) was installed in March 2000 by Compliance. Product was noted at MW-10 on three occasions; 9/20/2000 (.02 feet of product), 9/27/01 (.02 feet of product), 11/27/01 (.07 feet of product), 12/18/01 (.02 feet of product) and 1/22/02 (.01 feet of product). MW-10 was subsequently gauged 25 times from 2/21/02 through 7/26/06 (a 53 month time span). Product has not been noted at MW-10 since the 1/22/02 gauging event. Static groundwater elevation has cycled above and below the optimum elevation where free product has been noted

several times over the last 53 months. MW-10 is located 75 feet north of the northernmost sentinel wells installed by Compliance (MW-6, MW-7 and MW-8), in July 1999. Product has never been noted at these three monitor points.

Compliance previously indicated product within MW-10 was from a source separate from the Total **Site.** ESI installed MW-26 on July 11, 2006, directly south of MW-10 to evaluate adsorbed/dissolved hydrocarbon constituents and free product. Results indicated adsorbed and dissolved hydrocarbon constituents at MW-26 were below method detection limits; except for dissolved methyl-tert-butyl-ether (MTBE) which was present at 4.6 parts per billion (ppb), which is below most restrictive Residential Drinking Water RBSL.

MW-26 time series analytical results and free product monitoring confirm soil impact has attenuated. MW-26 will be used to evaluate groundwater attenuation in this area. Please see Appendix B, Table 1- Free Product Recovery Summary, which outlines the free product history of the **Site.**

Secondary Sources of Hydrocarbon constituents

Secondary sources of hydrocarbon constituents are noted at the **Site**. Secondary source areas can be seen in Appendix A: Figure 3; Estimated Horizontal Extent of Free Product Map and Figure 4A; Soil Analytical Concentration Map, Expanded View.

Secondary source areas:

1) The northwestern UST Cavity
2) Soil beneath former dispenser near MW-2

From the 4th quarter of 2004 through present, product has been remediated via bailer methods. Product has been noted periodically within MW-2, MW-11, MW-20 and MW-21. Please see Appendix B, Table 1 - Free Product Recovery Summary for a chronology of free product gauging and removal activities.

Free product was most recently gauged December, 2005; February, 2006 and July, 2006. ESI is scheduling free product recovery. Please see the attached NESA Free Product Recovery Report, Appendix C; Tab 3.

2.2 Overview of Prior Release Investigation

The Initial Assessment Report (IAR) prepared and submitted to MDEQ on May 24, 1999, by Compliance discusses:

- Removal of four (4) USTs from two excavations.
- Collection of two tank floor water samples
    - southeastern excavation (Tank Pit #1 Sample)
    - northwestern tank excavation (Tank Pit #2 Sample)

The May 24, 1999, Compliance IAR is a document of record with MDEQ and is not included as an attachment to this report.

The Compliance FAR submitted on April 4, 2000 recommended four main components to the Corrective Action Plan (CAP). Recommendations included:

1) Identify down gradient extent of impact.
2) Installation and Operation of the MAV/DO-IT System.
3) Implementation of a groundwater monitor program.
4) Submittal of a Tier II Closure Report.

The May April 4, 2000, Compliance FAR is a document of record with MDEQ and is not included as an attachment to this report.

On October 10, 2000, MDEQ completed an audit of the April 4, 2000 Compliance FAR. MDEQ determined the vertical and horizontal extent of dissolved hydrocarbon constituents was not defined; the extent of free product had not been defined; utility layout not complete; free product monitoring in the area of former MW-4 incomplete; and, prior to implementing the CAP, additional supporting field data must be obtained. Please see Appendix C; Tab 4: MDEQ's *Review of Final Assessment Report, October 10, 2000*, which addresses each issue in detail.

2.3 Regional Groundwater Conditions

The nearest surface water and closest sensitive receptor is Chippewa River. The Chippewa River course trends from northwest beginning at Coldwater Lake and Lake Isabella meandering in an easterly direction. Chippewa River passes the **Site** trending north approximately 2,000 feet to the west. The **Site** elevation is approximately 766 feet above mean sea level. The elevation of the lowlands within the Chippewa River flood plain is approximately 750 feet above mean sea level, based on U.S.G.S Mt. Pleasant, Michigan Topographic Quadrangle Map. Chippewa River is approximately 16 feet lower than the surface of the **Site**. Chippewa River creates a groundwater divide and is the receiving stream of the surrounding watershed. Near surface groundwater at the **Site** has historically demonstrated a component of flow towards Chippewa River. Please see Appendix A: Figures –Figure 1, **Site** Location Map.

The **Site** is located near the intersection of four Sections (Section 10, 11, 14 and 15) of Union Township. A search of Michigan Water Well Records in Sections 10, 11, 14 and 15 of Union Township produced 6 Water Well Records from Section 10; 6 Water Well Records from Section 15; 69 Water Well records from Section 11; and, 90 Water Well records from Section 14. The four sections represent a radius approximately one-mile from the **Site**.

Closest Groundwater Wells to the **Site**:

- Section 14 Twenty- one water wells are located within one-half mile radius of the **Site**. The closest wells are:
  - 429 S. Arnold St. (one-quarter mile west of the **Site**).
  - 2094 Isabella Rd. (less than one-eighth of a mile west of the **Site**).
  - Eva VanOrden Well (one-quarter mile southwest of the **Site**).
  - 2094 S. IsabellaRd. (less than one-eighth of a mile southwest of the **Site**.
  - 2 Wells at 1506 N. Fancher Rd. (one-quarter mile west of the **Site**).

- Section 15 No Water Wells were documented within one-half mile of the **Site**. The closest well is:
  - Crouse Central Supply (address not listed). Over one-half-mile west of the **Site**.

Wells located within Sections 14 and 15 are up gradient of the Site.

- Section 11 Six Water Wells are located within one-half mile radius of the **Site**. The closest wells are:
  - 975 S. Mission Rd. (less than one-quarter mile from north of the **Site**).
  - 1488 S. Winn Rd. (less than one-quarter mile northeast of the **Site**).

- Section 10 One Water Well is located within on-half mile of the **Site**. The closest well is:
  - 1113 N. Mission Rd. (600 feet north of the **Site**). Please see Appendix A: Figures –Figure 1, **Site** Location Map which shows the location of 1113 N. Mission Road.

Residential potable and non potable wells within Section 10 and 11, as noted above, are located down gradient and laterally to the **Site.** Groundwater is migrating at a rate of 2.56 feet per year (please see section 3.4 of this report). The dissolved hydrocarbon plume has stabilized approximately 200 feet northwest of the **Site** property boundary. The closest of the potable/non-potable water wells is located approximately 600 feet from the **Site,** and is not threatened by the dissolved hydrocarbon plume within a two-year travel time of the leading edge of the dissolved hydrocarbon plume. Please see Appendix D; Tab 1: Domestic Water Well Records, which indicates lithology, depth of boring and screened intervals of domestic potable and non-potable water wells near the **Site**.

The City of Mt. Pleasant has completed a well head protection zone study surrounding the municipal wells. A map obtained from the Mt. Pleasant well head protection study indicates the ten year travel time (exclusion zone) for the eastern City Well Field begins approximately two miles south (up gradient of the **Site**). The ten year travel time (exclusion zone) for the western City Well field begins approximately two and one-quarter miles up gradient and lateral (west) of the **Site**. Please see Appendix A: Figures – Figure 1A; Well Head Protection Zone Map.

Dissolved hydrocarbon constituents associated with the release at the **Site** do not encroach the ten year travel time exclusion zone of the well head protection area. Based on information published by the author of the Mt. Pleasant Well Head Protection Study; Fleis and VandenBrink, Inc., the near surface adsorbed hydrocarbon plume at the **Site** will not impact Mt. Pleasant's municipal water supply within a ten year travel time. The **Site** is located down gradient of the well head protection zones. Please see Appendix D; Tab 1: Domestic Water Well Records, which indicates lithology, depth of boring and screened intervals of near **Site** domestic potable and non-potable water wells.

3.0 SPECIFIC SITE CHARACTERIZATION INFORMATION

3.1 Soil Conditions and Characteristics / Site Lithology

The logs of 39 soil borings/monitor wells completed on-**Site** and off-**Site** by Compliance and ESI present a comprehensive profile of subsurface conditions across the study area. The lithology indicates:

- From surface to approximately two-feet below ground surface (bgs), the soil consists of fill material under constructed areas. Topsoil is noted from surface to approximately six inches bgs in greenbelt areas.
- Beneath the fill material/topsoil the lithology transitions to non-cohesive material. Fine to medium sand is the primary soil lithology; however, a predominant silty-clay unit intercalates though the sand. The thickness of the silty-clay ranges from 2 feet to 7 feet. Clay material is not noted within several soil borings at the central portion of the **Site**. The absence of clay at the central portion of the **Site** is most likely a result of soil removal activities during historical **Site** development. The silty-clay unit is noted to some degree to the north, south, east and west of the central study area.
- Sand is predominantly noted above and below the silty-clay layer. The deepest soil boring was advanced to 17 feet bgs (MW-28). Silty-clay was noted at MW-28 from 7.5 feet bgs to 11.5 bgs. Sand was noted at MW-28 from 11.5 feet bgs to terminal depth (17 feet bgs).

Evaluation of near **Site** domestic water well records confirm the lithology within the study area as being lacustrine clays and silts interbedded with lacustrine sand and gravel. The **Site** is located near the contact of the lacustrine sediments to the east and glacial outwash/till to the west. As expressed within the domestic water well logs, the alternating sand/gravel-silty clay layers are noted to a depth of over 300 feet are indicative of the regional unconsolidated geology. Please see: Appendix A: Figures – Figure 5; Geological Transect Map; Figure 5A; Cross Section A – A', and Figure 5B; Cross Section B – B'. Soil boring logs can be seen in Appendix D; Tab 1: Domestic Water Well Records, and Appendix D; Tab 2: Boring Logs/Monitor Well Diagrams.

3.2 Delineation of the Extent of Soil Hydrocarbon constituents

As previously noted, the extent of adsorbed and dissolved hydrocarbons, as defined by the MDEQ hydrocarbon indicator compounds, were not completely defined at the **Site** at time of Compliance, Inc.'s, *Final Assessment Report, April 4, 2000,* based on MDEQ's *Review of Final Assessment Report, October 10, 2000*.

ESI installed SB-A through SB-E and MW-22 through MW-28 in July 2006, to define the vertical and horizontal extent of adsorbed and dissolved phase hydrocarbon constituents as well as free product delineation.

ESI's Geoprobe™ investigation was conducted per industry standards. Soil borings were advanced with 4.25 inch hollow flight augers and sampled using a 2-inch diameter, 4 foot long core barrel. Soil samples from the Geoprobe™ were screened in the field for volatile organic compounds (VOCs) using a calibrated photoinization detector (PID) at selected intervals. The samples were placed in sealed dedicated plastic sample bags and the tip of the PID was then inserted into the bag to obtain a reading of VOCs that had volatilized into the headspace. The PID instrument has a detection level of one part per million (ppm) VOCs. The PID readings and the observed lithology are included in Appendix D; Tab 2: Soil Boring Logs/Monitor Well Diagrams.

Comprehensively, from initial investigation, twenty-five (25) soil samples were analyzed from the vadose zone noted at the time of drilling, to define the horizontal and vertical extent of adsorbed hydrocarbon constituents. Soil samples were selected based on locations relating to the release location, utility corridors and areas where free phase product was historically observed.

Adsorbed hydrocarbon constituents are noted above most restrictive Risk Based Screening Levels (RBSLs) at seven locations across the **Site**. Csat soil was noted from one location, SS-6. SS-6 sampled in 1999, at a depth of 3.0 feet bgs, with Ethylbenzene concentrations of 405,000 ppb; total Xylenes 755,000 ppb; 124-TMB 365,000 ppb; and, 135 TMB 118,000 ppb, is located at in the center of the former northeastern dispenser excavation. The soil sample was collected before the 100 cubic yards of soil were excavated in that area. Soil samples results obtained from SS-6 may no longer be indicative of soil near the former excavation, and Csat soil may no longer be present at the formerly excavated location near the northeastern excavation. Areas of former Csat soils will be evaluated during confirmation sampling during the remediation phase of the investigation.

For soil samples collected and sampled after April 1999, the highest concentrations of adsorbed hydrocarbon constituents noted were at MW-28 on July 11, 2006. Soil analytical results obtained from MW-28 at 11.5 feet bgs indicated Benzene at 320 ppb; Ethylbenzene 3,400 ppb; total Xylenes 13,860 ppb; 124-TMB 6,200 ppb; and 135-TMB 1,500 ppb. MW-28 was drilled within the central portion of the former southeastern UST cavity near MW-4. The southeastern UST cavity was not formerly remediated and will be addressed during the remediation phase. Soil samples will be collected from within this area to demonstrate attenuation to clean or to define the remediation area.

The adsorbed hydrocarbon plume has been defined conservatively, based on information available at time of report. The results indicated the adsorbed hydrocarbon plume was defined to the most restrictive screening levels at the northern edge of the adsorbed plume at MW-26, MW-27 and SS-5. The plume definition to the north may be redefined to a smaller plume as additional soil samples are collected. ESI illustrated a larger adsorbed plume because soil data from MW-6, MW-7 and MW-8 was not

collected during the initial Compliance investigation. Please refer to Appendix A: Figures –Figure 4, Soil Analytical Concentration Map. ESI will collect soil samples in the area of SB-6, SB-7 and SB-8 during the remediation phase of this investigation. The eastern side of the adsorbed hydrocarbon plume is defined by SB-1, SB-9 and SB-24. The southern edge of the adsorbed hydrocarbon is defined by MW-24, MW-23, SB-A and SB-25.

These two soil borings offer adequate soil analytical information to allow the southwestern edge of the adsorbed vertical and horizontal plume to be defined with a high level of confidence. The adsorbed hydrocarbon plume is defined to the west by MW-27 and MW-13. Soil analytical results including depth of sample can be found in Appendix B, Table 2 – Soil Analytical Results. The location of the sample points with corresponding analytical data is located in Appendix A: Figures –Figure 4, Soil Analytical Concentration Map. Maximum soil concentrations for each indicator compound can be found in Appendix B, Table 3 – Tier I Maximum Concentration Comparison for Soils. Figure 5A; Cross Section A – A', and Figure 5B; Cross Section B – B' give a vertical representation of soil lithology.

The lateral extent of adsorbed hydrocarbon constituents above most restrictive RBSLs, an area approximately 12,800 ft^2, has been impacted. The thickness of adsorbed hydrocarbon constituents above most restrictive RBSLs is taken from grade to the top of the shallow water bearing unit (from approximately 3.0 to 10.0 feet bgs). The volume of soil hydrocarbon constituents above most restrictive RBSLs is approximately 2,845 yds^3. The volume of soil hydrocarbon constituents above respective clean up criteria will be dependent upon closure options as noted later in this report. Please see Appendix A: Figures –Figure 4, Soil Analytical Concentration Map.

Contaminant secondary source areas should be considered still present at the **Site**. The potential secondary source area is soil near the former northwestern UST basin. The adsorbed contaminant source area can be seen in Appendix A: Figures –Figure 4, Soil Concentration Analytical Map; and Figure 4A, Soil Analytical Expanded View Map. Soil Laboratory Analytical Reports not submitted to date are located in Appendix E: Tab 1, Soil Analytical Reports. No other soil hydrocarbon constituents have been detected during ESI's investigation.

Lead Investigation

During the initial phases of investigation in 1999, soil was evaluated for the presence of lead. The results indicated lead was not present within the soil at concentrations greater than Statewide default background levels of 21 parts per million (ppm), except for SS-5 at 3 feet bgs which noted a lead concentration of 22.6 ppm. The highest concentrations of lead noted on **Site** are slightly above statewide background and much lower than the Protection of Drinking Water RBSL of $7.0x10^5$ ppb. Fine and coarse lead evaluations were performed by ESI in July 2006. The results indicated the highest concentration of fine

lead was 19.6 ppm noted at SB-A at 4 feet bgs. The highest concentration of coarse lead was noted within SB-A at 4 feet bgs, at a concentration of 8.65 ppm. ESI concludes lead is not a component of the adsorbed hydrocarbon constituent plume and is not a contaminant of concern for release C-0163-99. Please see Appendix B, Table 2B – Soil Analytical Results.

3.3 Utility Corridor Assessment

Storm Sewer

One storm sewer is present near the northeastern portion of the **Site**. The storm sewer is 12 inches in diameter and 4.5 feet bgs (invert). Water flows within the storm sewer from south to north. This drain begins at the northeastern corner of the **Site**. A storm drain does not run adjacent to the eastern portion of the **Site** along Mission Street. There is no storm sewer within the rights-of-way of Pickard Avenue or the western alley. Please see Appendix A: Figure 2: Site Layout Map.

One 4-inch diameter storm drain which is 3 feet bgs leads into the primary drain at the northeastern corner of the **Site**. The storm sewer lead is 3 feet bgs (invert). This drain was disconnected and capped at the **Site** and left in place during construction activities. A storm sewer also tees off of the primary line. The tee is 12 inches in diameter and the invert is 3.5 feet bgs (invert).

There are no storm sewer manholes on the **Site** property. The closest storm sewer manhole to the **Site** is located at the eastern side of Mission Street. ESI evaluated ambient air within this storm sewer manhole during our July investigation with a photoionization device (PID). The results of the PID investigation did not indicate hydrocarbons in the ambient air within the manhole above method detection of the PID. Ambient air within the manhole will be re-evaluated during subsequent **Site** visits.

From date of initial investigation through 2006, groundwater has been noted between 9.15 and 11.38 feet bgs. Depth to groundwater is between six and eight feet below the invert of the storm sewer on and off-**Site**. GSI impact is not a relevant exposure pathway due to vertical isolation between the storm sewer and groundwater. GSI is discussed later within this report.

Sanitary Sewer

A Sanitary Sewer is located adjacent to the western side of the **Site** within public rights-of-way. The sanitary sewer runs north/southbound is located eleven feet bgs (invert). The sanitary sewer lead was removed from the **Site** during demolition activities. ESI does not possess records indicating where the former sanitary sewer entered the building.

Water

City water supply is located at approximately six feet bgs (invert) along the northern side of Pickard Avenue and western side of Mission Street. The water main has a diameter of approximately 6 inches. Water service previously entered the **Site** from the south side of the property. However, the water line was removed from the **Site** during demolition activities. There are no potable or non-potable wells on **Site**. The water main is not a preferential pathway for hydrocarbon migration.

Natural Gas

A natural gas main runs east west along the northern portion of the **Site** within the Pickard Road rights-of-way. Records are not available which would suggest where the former gas line entered the **Site** building. However, based on where the primary line runs along Pickard Avenue, we believe the gas line entered the **Site** from the north. Natural gas service was removed from the **Site** during demolition activities.

Utilities are located above the groundwater surface at and near the **Site**. It is ESI's judgment, based on depth to utilities, contaminant concentration, and depth to groundwater that the utility trenches are not creating a preferential pathway or a groundwater diversion and dissolved hydrocarbon constituents are not directly affecting utilities at this time. Please see Appendix A: Figures –Figure 2, **Site** Layout Map, which illustrates the location and depth of utilities. Utility trench depth is illustrated in two cross sections. Please see Figure 5A; Cross Section A – A', and Figure 5B; Cross Section B – B'.

3.4 Delineation of the Extent of Groundwater Hydrocarbon Constituents

On July 26, 2006, ESI personnel accessed the **Site** to perform groundwater sampling activities. All located monitor wells were surveyed to a known benchmark. Survey data was utilized to determine groundwater gradient, flow rate of the near surface groundwater, as well as surveying tops of all soil borings/monitor wells for inclusion on cross sections maps. Groundwater gauging data can be found in Appendix B: Table 4- Groundwater Elevation Data. Groundwater was not noted above top of any screens during gauging activities.

The historical near surface groundwater gradient at the **Site** is towards the northwest. Reports from initial release to present indicate the general trend of the groundwater gradient has been consistently to the northwest towards Chippewa River, which would be expected as Chippewa River is the regional watershed basin. The groundwater gradient across the **Site** is gradual and most recently determined by ESI to be towards the north. Please see Appendix A: Figures –Figure 6, Groundwater Gradient Map. Groundwater flow rate was determined using three streamlines (hydrogeological equivalent of dip) of measurement from the Groundwater Gradient Map and taking an average slope of the three.

- Streamline (1) - MW-22 to MW-1 is an apparent dip as determined by corrected groundwater measurements.
- Streamline (2) - MW-1 to MW-7 is an apparent dip as determined by corrected groundwater measurements.
- Streamline (3) - MW-25 to MW-3 is an apparent dip as determined by the corrected groundwater measurements.

- Hydraulic Gradient was determined to be:
  - Streamline (1) 0.0013 ft/ft (direct measurement)
  - Streamline (2) 0.0003 ft/ft (direct measurement)
  - Streamline (3) 0.0004 ft/ft (direct measurement)

Average Hydraulic gradient is 0.0007 ft/ft across the study area.
Hydraulic gradient (I) was calculated as:

$$I = \frac{h_1 - h_2}{L}$$

Where

h_1 = Static water level up gradient MW-25 MW-22 MW-1
h_2 = Static water level down gradient MW-3 MW-1 MW-7
L = Horizontal distance between up gradient and down gradient points.
Line 1 = 95 feet
Line 2 = 95 feet
Line 3 = 80 feet

The velocity of the groundwater was calculated using the equation:

$$V = \frac{K(I)}{p}$$

Where:

V = Velocity
K = Average hydraulic conductivity

Soil at the study area consists of fine to medium sand with little silt (SP/SW on the USCS scale). The hydraulic conductivity was determined to be 3 ft/day or 3.53×10^{-4} cm/sec. (estimated) as described in Groundwater and Wells (2nd edition) by F. Driscoll.

I = Hydraulic Gradient
P = Average Porosity

Soil at the impacted groundwater zone (study area) consists of fine to medium sand with little silt. Groundwater and Wells (2nd edition) by F Driscoll states the estimated effective porosity for this soil type is 0.3 cm^3/cm^3.

The average velocity of the groundwater at the **Site** is:

0.007 feet/day or 2.56 feet/year. Previous investigations determined the velocity to be greater than ESI's calculated values. Compliance estimated the groundwater velocity to be 14 to 24 feet per year. With porosity and hydraulic conductivity being in similar ranges from the ESI and Compliance investigation; the difference in reported hydraulic gradient is the variable that changes the velocity. The hydraulic gradient in 2000 was greater than observed in 2006. The groundwater gradient has decreased at the northwest portion of the study area over time. This difference in calculated gradient results in the estimated velocity to decrease by approximately one magnitude from the date Compliance's 2000 FAR was submitted.

Based on the most conservative groundwater vectors (Compliance's 24 feet per year calculation) potable/non potable water supply wells will not be affected by dissolved hydrocarbon leading edge constituents emanating from the **Site** within a two year travel time. As noted in other sections of this report, the closest sensitive receptor, and water supply well are greater than the two year travel time of the leading edge of the dissolved plume even when using Compliance's velocity of 24 feet per year. The groundwater data indicates that the dissolved plume is stable and shrinking. Additionally, there does not seem to be any hydrologic conditions which would influence flow direction. Utilities near the source area are located above groundwater and the well head protection study demonstrates the municipal wells do not influence groundwater at the **Site**. Groundwater does naturally flow towards Chippewa River, which is the low point or receiving area for the local watershed. There is not a lateral component to groundwater flow in the area of the **Site**, and there is not any other natural or man made features that would influence natural groundwater movement.

As a result of our review of regional groundwater wells and on-**Site** soil borings, in conjunction with an evaluation of the groundwater performance and soil characteristics, we can not rule out at this time that the near surface groundwater unit is not a potable aquifer. However, our investigation (see previous sections) does not indicate a lower aquifer being impacted by the release as we have installed monitor wells to a depth of 20 to 25 feet bgs (MW-27) in the zone of free product and excavations.

Twenty-two (22) groundwater samples were collected via low flow methods during ESI's investigation. Low flow stabilization data is available in Appendix H: Low Flow Backup Data.

Water samples were analyzed for gasoline range volatile organic compounds (VOCs) using EPA method 8260. One duplicate groundwater sample was collected and analyzed for VOCs to evaluate precision and quality control. A groundwater trip blank was prepared and analyzed for VOCs as well. Sample water was collected into two hydrochloric acid preserved 40 milliliter (ml) vials from each monitor well location.

Relevant information was entered onto a chain of custody form and the samples were placed into a cooler containing ice to maintain a sample temperature as close to 4°C as possible. Samples were analyzed at BioChem Laboratories, Inc.

The groundwater analytical results indicated hydrocarbon constituents above Residential/Commercial I Drinking RBSLs at MW-1, MW-2 (free product), MW-3, MW-4, MW-5, MW-6, MW-7, MW-10, MW-11, MW-12, MW-15, MW-20, MW-21, MW-27 and MW-28.

Methyl-tert-butyl-ether (MTBE) was historically present at the **Site**; however, MTBE has not been present above method detection limit within any well sampled since 2004.

Naphthalene concentrations have been decreasing over time. Naphthalene was last noted at MW-28 with a concentration of 440 ppb. Naphthalene at a concentration of 440 ppb is lower than drinking water RBSL of 520 ppb, but is higher than the GSI value of 13 ppb.

2-Methylnaphthalene was noted at MW-28 in concentrations of 200 ppb. The Drinking Water RBSL is 260 ppb. Concentrations of 2-Methylnaphthalene have decreased across the **Site** over time.

The highest concentration of Benzene noted during the July 2006 sampling event was 2,700 ppb at MW-3. Concentrations of Benzene have decreased over time at all sample locations across the **Site**. Although the concentrations of Benzene across the **Site** are present in excess of Drinking Water and GSI RBSLs, the decrease in concentration at the discrete sampling points indicates a stable and shrinking of the dissolved Benzene plume. Of exceptional note is the decrease of Benzene at MW-6 and MW-7 and the continued absence of Benzene at MW—8, as well as confirmation of the absence of Benzene at MW-26. The absence of Benzene at MW-26 is also indicative of vertical delineation. This declining trend of dissolved contaminants of concern indicates the leading edge of the dissolved Benzene plume is not advancing forward. Additionally, the areas or contributors to dissolved hydrocarbon constituents in secondary source locations may be reducing. Please see Appendix B, Table 5 – Groundwater Analytical Results, and Appendix B, Table 6 – Tier I Maximum Concentration Comparison for Groundwater. See Appendix A: Figure 7; Groundwater Analytical Concentration Map, which illustrates groundwater concentrations at the **Site**.

The dissolved hydrocarbon plume has been defined horizontally to most restrictive RBSLs. The adsorbed plume is defined by MW-9, MW-8, MW-13, MW-25, MW-23, MW-24, MW-17, MW-19 and MW-18. The horizontal extent of the dissolved plume may be defined to half the current estimated size with additional delineation north of MW-7, MW-6 and MW-17. ESI will complete a historical record investigation respective of past uses for the property on which MW-10 is located. Based on information obtained to date,

ESI believes MW-10 is an outlier (with respect to the Total Station #4312 dissolved hydrocarbon plume) and hydrocarbon constituents noted in this area are not associated with the release at former Total Station #4312.

The vertical dissolved plume has been defined by:

- The density of released material has a density less than the surrounding groundwater and will migrate from the source upward (light non-aqueous phase liquid [LNAPL]).
- Lead was not associated with the release.
- Concentrations of gasoline constituents at depth decrease over time even in secondary source areas.
- Soil boring logs surrounding the **Site** document confining clay is regionally encountered. Clay ranges from 6 to 46 feet thick.
- There are no documented pumping wells in the near vicinity of the **Site** which would draw dissolved contaminants to a greater depth.
- There are no documented natural or man-made features which would alter the natural gradient or velocity of the dissolved contaminants.
- The source of the deepest release point was documented to be at the bottom of a UST within the southeastern excavation. The invert of USTs typically are placed at 12 feet bgs for tanks of this size.

Please see Appendix A: Figure 7; Groundwater Analytical Concentration Map, which visually illustrates the extent of the dissolved hydrocarbon plume to most restrictive RBSLs. Also, Appendix A: Figures Figure 5, Geological Transect Map; Figure 5A, Cross Section A – A', and Figure 5B, Cross Section B – B'. Groundwater Laboratory Analytical Reports not submitted to date are located in Appendix E: Tab 2; Groundwater Analytical Reports. ESI did not discover hydrocarbon constituents not associated with release C-0163-99 during the investigation. An exception was the hydrocarbon indicator compounds located off-**Site** at MW-10, which is discussed in earlier sections of this report.

3.5 Conditions and Characteristics in Other Environmental Media

Ambient air quality within sewer systems was evaluated with a PID to determine if volatile organic compounds posed an explosive environment and to determine if dissolved hydrocarbon vapors migrated into the sewers. The results of the PID study concluded vapors were not present above 1 ppm (the detection level of the PID device) within the sewer system.

Location	Testing Device	Reading
Northeastern Catch Basin	PID	< 1ppm

All structures (buildings) and utilities have been removed from **Site**. Indoor air quality is not is not a current concern.

There is not any known hydrocarbon constituents within any media other than discussed within this report. Impacted media is groundwater and soil. Indoor air, sensitive receptors including flora and fauna are not impacted or affected by the release as discussed within previous sections of this report.

3.6 Site Classification

Throughout the history of the release the **Site** has been classified as a Class 1. Based on investigation activities conducted, ESI has demonstrated the **Site** is a Class 1, according to Operational Memorandum Number 3, *Part 213 Leaking Underground Storage Tank Site Classification System, August 21, 2003*.

The evaluated potential exposure pathways of concern include soil ingestion/absorption, inhalation, potable water use and recreational use/sensitive habitat.

- FREE PRODUCT
  - Free Product is noted at the Site. The impact of Free Product places the **Site** at a Category 1 Risk.

- FIRE / EXPLOSION
  - Vapors present are below concentrations less than 10 percent of the LEL and groundwater concentrations are below the Part 201 Explosively Screening Level. Although free product is present, structures or vessels, pipes, etc., are not impacted by vapors from a free product source as documented within this report.

- DRINKING WATER INGESTION
  - Groundwater was impacted via the UST release with volatile organic compounds. However, the area is serviced by municipal water and the impacted groundwater has been defined. The leading edge of the contaminated groundwater plume has been demonstrated to be greater than a two year travel time to any domestic/potable/non-potable water supply.

- DIRECT CONTACT
  - Soil and groundwater hydrocarbon constituents are above direct contact criteria. Direct Contact RBSLs are exceeded at SS-6 at 3 feet bgs. SS-6 is in an area of Csat soils. These soils may have been removed during previous remediation activities. However, The current unverified nature of soil in this area places the **Site** at a Category 1 Risk.

- INHALATION

- Soil and groundwater hydrocarbon constituents are above the Residential/ Commercial criteria. However, no structures are on **Site**. This receptor will be addressed during future land use evaluations.

➢ GROUNDWATER/SURFACE INTERFACE (GSI)

- It is demonstrated that GSI values for soil and groundwater have been exceeded at the **Site**. Please see Section 3.2, *Delineation of Soil Hydrocarbon Constituents* and Section 3.3 *Delineation of Groundwater Hydrocarbon Constituents* of this Report. Utility trenches at the **Site** which are located adjacent to impacted monitor wells are within two years travel time from the leading edge of the dissolved plume. However, the utility trenches (Storm Sewers) are above groundwater and are not impacted.

➢ SENSITIVE RECEPTORS

- The leading edge of the contaminated groundwater plume is not within two years travel time to a sensitive habitat or resources. Please see Section 2 of this report, Regional Groundwater Conditions, which discusses Cherokee River, as the nearest sensitive receptor.

4.0 RESULTS OF RBCA EVALUATION

4.1 Exposure Pathway Characterization

Relevant transport mechanisms, exposure routes and receptors are identified on the flowchart included in Appendix F, Chart F.1. This chart follows Figure 2, Exposure Scenario Evaluation Flowchart, provided in the ASTM RBCA E 1739-95 (re-approved in 2002).

Transport mechanisms determined to be irrelevant and the reason why are listed below.

- Direct Transport of Soil to Surface Water: The site is not adjacent to or relatively close to a surface water body. Impacted soil at this is located below the soil surface and does not contact surface water runoff. Therefore soil from the site will not be directly transported to surface water.
- Leaching to Groundwater and subsequent Groundwater to Surface Water Transport: The site is not adjacent to or relatively close to a surface water body. The only way for groundwater to contact surface water is through a storm sewer. However, storm sewers at this site are relatively shallow (less than 5 feet below grade). Groundwater impacted by the release is located at an approximate depth below grade of 10 feet. Impacted groundwater from the site will not infiltrate into the storm sewers.
- Transport Mechanisms associated with Impacted Sediment: This site is not adjacent to or relatively close to a surface water body. It is unlikely the release impacted sediment and therefore this pathway is not relevant.

In addition to the exposure routes associated with the above irrelevant transport mechanisms the following exposure routes were determined to be irrelevant.

- Exposure to Bioaccumulative Chemicals of Concern (transport mechanism groundwater transport to surface water): The chemicals associated with the release do not include a bioaccumulative chemicals of concern.
- Endangered Species Exposure, Sensitive Habitat Exposure or Other Ecological Concerns/Exposures (via the transport mechanism of groundwater transport to surface water): The site is not near an endangered species habitat or other sensitive habitat. Impacted groundwater from the site will not infiltrate into the storm sewers.

The remaining transport mechanisms and exposure routes listed in Appendix F are considered to be relevant. However, several of the relevant transport mechanisms and exposure routes are not a concern due to the level of hydrocarbon constituents remaining at this site. The relevant pathways (transport mechanism and exposure route) that warrant concern due to the level of hydrocarbon constituents and site characteristics:

Relevant On-site Exposure Pathways

- Soil Volatilization to Indoor Air and Residential/Commercial I Inhalation;
- Soil Leaching to Groundwater and Residential/Commercial I Ingestion and Aesthetic Impacts;
- Soil Leaching to Groundwater and Commercial II, III, IV/Industrial Ingestion and Aesthetic Impacts;
- Groundwater Transport and Residential/Commercial I Ingestion and Aesthetic Impacts;
- Groundwater Transport and Commercial II, III, IV/Industrial Ingestion and Aesthetic Impacts; and
- Exposure pathways impacted by the presence of free phase gasoline in the saturated zone (residual free phase hydrocarbons may be trapped under the water table).

Relevant Off-site Exposure Pathways

Off-site areas impacted by the release include city and state roads, associated rights-of-way and the property north of the site across Pickard Avenue (the J.W. Filmore's restaurant shown on the site maps included with this FAR). Criteria for the following pathways were exceeded in these areas.

- Groundwater Transport and Residential/Commercial I Ingestion and Aesthetic Impacts;
- Groundwater Transport and Commercial II, III, IV/Industrial Ingestion and Aesthetic Impacts; and
- Exposure pathways impacted by the presence of free phase gasoline in the saturated zone (residual free phase hydrocarbons may be trapped under the water table in the Pickard Avenue right-of-way).

EnviroSolutions does not believe the groundwater ingestion pathways listed above are relevant for the off-site roads and right-of-ways due to the following factors.

- The off-site areas impacted by the release are currently developed, maintained and used as roadways.
- EnviroSolutions contacted the City of Mount Pleasant, Department of Public Works and the Michigan Department of Transportation regarding the roads adjacent to the subject site. The city and state confirmed that the roads will be permanently remain roads.
- The release occurred in 1999. Groundwater hydrocarbon constituents above any of the above criteria has not migrated beyond the off-site areas currently impacted since that time. Groundwater monitor data indicates that that the plume is stable and decreasing in magnitude.
- The Groundwater Transport and Ingestion and Aesthetic Impact exposure pathways will not be relevant for the roads and right-of-ways if the roads and right-of-ways are maintained.

Free Phase Hydrocarbons or Free Product

Free phase hydrocarbons or free product has been measured in the following wells in the past: MW-2, MW-3, MW-10, MW-11, MW-20 and MW-21. As stated in Section 2.1, the free product in MW-10 is likely from a source other than the subject release. Free product has not been detected in this well since January 2002. The absence of free product in this well does not appear to be the result of water table fluctuations. The free product on-site and the Pickard Avenue right-of-way was addressed through periodic vacuum extraction (MAV remediation completed by Compliance and discussed in 2.1 of this FAR) completed from September 2000 to December 2003. However, residual free product remains at this site. Hydrographs for select wells are shown in Appendix F, Tab 2. EnviroSolutions does not believe this free product presents an immediate risk to human health and the environment due to the following factors.

- As shown in these hydrographs, the free product is normally trapped under the water table, except during periods of time when the water table at the site relatively low. The residual free product does not appear to be mobile, based on relatively small observed thicknesses in wells and the gauging and sampling of down-gradient monitor wells.
- Groundwater in the wells where free product has been measured has been sampled when free product was absent from the wells. The dissolved concentrations in the groundwater samples were relatively low (total dissolved BTEX less than 12,000 micrograms per liter).
- The residual free product is located in the saturated zone, approximately 10 feet below grade and separated from the surface by a layer of clay.
- Vapor phase hydrocarbons have not been detected in sewers nearby the site.
- Current land use does not result in exposure to the residual free product.

Based on the above factors it does not appear that residual free phase hydrocarbons pose an immediate risk to human health and the environment. However, this FAR will address remediation of the remaining free product.

Complete Pathways

It should be noted that it is likely that none of the above pathways is currently complete. A deed restriction prevents the use of groundwater at the site and the impacted property across Pickard Avenue is supplied with municipal water. As discussed above, current land use does not result in exposure to the residual free product.

FAR Exposure Pathway Characterization vs. Previous Pathway Characterizations

An IAR was submitted for this site in May of 1999. However, the risk associated with the subject release has only decreased since this time of the release or during the course of the subsequent investigation. EnviroSolutions developed the exposure pathway characterization included in Appendix F based on complete characterization and delineation data. Consequently, the exposure pathway characterization included in this

FAR is more accurate and representative of site conditions than any previously completed risk assessments.

4.2 Optional Tier II Evaluation

A site-specific Tier II evaluation was not completed for this site.

4.3 Modeling

No modeling associated with risk assessment was completed for this FAR.

5.0 FEASIBILITY ANALYSIS

A feasibility analysis of remediation alternatives is included in Appendix F, Tables F.5 and F.6. EnviroSolutions based the applicability of each alternative on the USEPA's How to Evaluate Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers (EPA 510-B-94-003, 510-B-95-007, 510-R-04-002).

Feasible remediation alternatives for residual free phase hydrocarbons in the saturated zone, as identified on Appendix F Table F.5, include:

- Groundwater Re-circulation or In-Well Stripping,
- In-situ Groundwater Bioremediation
- Chemical Oxidation
- Groundwater Pump and Treat,
- Monitored Natural Attenuation,
- Vacuum Extraction,
- Periodic Vacuum Extraction,
- Enhanced Aerobic Bioremediation, and
- Excavation and Dewatering.

Capital, annual and closure verification costs for each of the above alternatives is provided in Appendix F, Table F.6. A present worth cost for each alternative based upon the estimated cleanup times is also included in Appendix F.

As shown in Appendix F, the most cost effective remediation alternative is Chemical Oxidation. The present worth of this alternative, assuming a cleanup time of 1 year, is approximately $369,000. The following documents the rationale for selecting this corrective action.

Protection of Human Health and the Environment

Section 4.0 of this FAR identifies risks to human health and the environment. A description of how the proposed corrective action will eliminate or control each of these risks is summarized in the following table.

Protection of Human Health and the Environment

Exposure pathway that could potentially pose a risk to human health and the environment	Description of how the corrective action will protect human health and the environment
• Soil Leaching to Groundwater and Residential/Commercial I Ingestion and Aesthetic Impacts; • Soil Leaching to Groundwater and Commercial II, III, IV/Industrial Ingestion and Aesthetic Impacts; • Groundwater Transport and Residential/Commercial I Ingestion and Aesthetic Impacts; and • Groundwater Transport and Commercial II, III, IV/Industrial Ingestion and Aesthetic Impacts.	The selected corrective action will include a restrictive covenant that will prevent groundwater on the site and groundwater on the property north of the site from being used for potable purposes and thereby eliminate this exposure pathway.
• Exposure pathways impacted by the presence of free phase gasoline in the saturated zone (free phase hydrocarbons may be trapped under the water table)	As discussed earlier in this FAR, residual free phase hydrocarbons exist at this site. These hydrocarbons are primarily trapped under the water table. The selected corrective action is capable of remediating these hydrocarbons without the significant expense of groundwater removal, treatment and disposal associated with other technologies that would attempt to drawdown the water table in order to remediate the free product. Additional discussion and justification for the selected corrective action is included in Section 6 of this FAR.

Meeting the Requirements of the Risk Based Corrective Action (RBCA) Process

The RBCA process is intended to be a consistent decision-making process for the assessment and response to petroleum releases, based on protection of human health and the environment. The RBCA process is illustrated on Figure 1 of the RBCA standard (ASTM E 1739-95, re-approved 2002). This FAR has followed this process. In Michigan, Tier II or Tier III evaluations are not typically performed and/or approved for all relevant exposure pathways. Therefore it is often necessary to proceed to the "Remedial Action Program" step of the RBCA process without completing a Tier II or Tier III analysis. That was the case for this site.

The goal of the "Remedial Action Program" step of the RBCA process is to "identify cost-effective means of achieving final corrective action goals, including combinations of remediation, natural attenuation, and institutional controls." The Feasibility Analysis process

followed in this FAR involves a consistent and objective evaluation of remediation alternative's (including natural attenuation) practicality and cost. Per RBCA, institution controls were considered as an option or an addition to remediation alternatives identified in the Feasibility Analysis. The ability of the selected alternative to protect human health and the environment was evaluated as discussed above.

Being a Permanent Solution

The selected corrective action relies on resource limitations and active remediation. The land resource limitations will be incorporated into a restrictive covenant that will be filed with the register of deeds and be permanently bound or tied to the land until an alternative demonstration is completed.

Being Cost Effective

The cost of the selected remediation alternative was the lowest of the feasible alternatives as shown on Appendix F, Table F.6.

Pilot Study

A pilot phase or study will be completed as discussed in Section 6 of this FAR prior to full scale implementation of the selected corrective action.

6.0 CORRECTIVE ACTION PLAN

6.1 Description of Corrective Action

The selected corrective action involves chemical oxidation of residual free phase hydrocarbons in the saturated zone and implementation of the following institutional controls.

- Restrictive covenants preventing the potable use of site groundwater and groundwater at the site across the street.

The proposed chemical oxidation corrective action will be completed in three phases: (I) pumping contaminated groundwater from a single extraction well, treating the water with ozone and hydrogen peroxide, and then re-injecting the treated water into a single injection well located within the contaminant plume; (II) repeating Phase I for a succession of several recovery and injection wells; and (III) slowly injecting hydrogen peroxide into the wells to maintain the oxidation-reduction potential or oxidizing environment created in Phases I and II. The treatment of water with ozone and hydrogen peroxide proposed for Phases I and II is called "advanced oxidation."

The issues detailed in the MDEQ's Remediation and Redevelopment Division (RRD) Operational Memorandum Number 4, Attachment 9, *Utilizing In-situ Treatments to Enhance Biological and Chemical Degradation: Peer Review Draft,* March 2005 are addressed in the following discussion or other sections of this FAR.

INFORMATION REQUIRED PER RRD OP. MEMO. 4, ATT.9

Feasibility of Oxidation

EnviroSolutions completed a preliminary evaluation of several closure and corrective action alternatives as discussed in Section 5.0 of this FAR.

1. Extent of Hydrocarbon constituents

The extent of hydrocarbon constituents is defined as discussed in Section 3.0 of this FAR.

2. Free Product

As discussed earlier in this FAR, periodic vacuum extraction was completed at this between September 2000 and December 2003 to remove free product. However, residual free product remains at this site. The residual free product does not appear to be mobile, based on relatively small observed thicknesses in wells and the gauging and sampling of down-gradient monitor wells. In addition, the free product is normally

trapped under the water table, except during periods of time when the water table at the site relatively low

EnviroSolutions understands that the MDEQ does not support the injection of oxidants into areas containing free product. However, EnviroSolutions believes that the proposed advanced oxidation scenario is feasible at this site for the following reasons:

- No buildings exist at this site. Receptors are unlikely to be present within the plume or area proposed for oxidation remediation.
- The free product does not appear to be mobile at this site. The free product is also primarily trapped under the water table.
- The majority of the contaminant oxidation will occur during the first two phases of treatment. These phases of treatment will involve pumping contaminated groundwater, treating the water with ozone and hydrogen peroxide and then re-injecting the treated water into the subsurface. The ozone and peroxide will first come into contact with hydrocarbons in the above-ground test equipment. EnviroSolutions expects the concentrations and mass of ozone and peroxide to be reduced as a result of this initial reaction with hydrocarbons. EnviroSolutions also expects the concentrations of ozone and peroxide in the subsurface due to any residual in the re-injected water to be orders of magnitude smaller than the concentrations used to initially treat the pumped groundwater.
- The proposed third or follow-up phase of treatment phase will involve slowly injecting hydrogen peroxide into the saturated zone to maintain the oxidation-reduction potential (ORP) created during Phases I and II. EnviroSolutions expects the majority of the saturated zone impact to be remediated during Phases I and II. Also, the mass and volume of hydrogen peroxide injected during Phase III will be relatively small. Due to these factors, EnviroSolutions does not expect that using hydrogen peroxide to maintain ORP and oxidize the remaining impacts will cause an adverse reaction.
- Despite the occasional appearance of free product in monitor wells, groundwater concentrations in wells that have contained product are not very high. The maximum total dissolved BTEX concentration detected during the last few sampling events was 22,600 micrograms per liter (µg/L). The maximum dissolved BTEX detected during the last sampling event was 9,930 µg/L. EnviroSolutions has successfully used ozone and hydrogen peroxide to treat purge water contaminated with hydrocarbons with total BTEX concentrations of 10,000 µg/L and flows of approximately 3 gallons per minute. At most, this treatment of hydrocarbons with ozone and peroxide caused the temperature of treated groundwater to increase by 2 degrees Fahrenheit maximum.
- EnviroSolutions has successfully injected ozone and hydrogen peroxide into the subsurface at a site in another state with similar free product characteristics as the subject site. At most, this injection of ozone and peroxide caused the temperature of groundwater to increase by a few degrees Fahrenheit.

- Phases I and II of the oxidation scenario proposed by EnviroSolutions will involve re-circulating groundwater in the subsurface though pumping from extraction wells and into injection wells. As stated previously, the residual free product at this site does not appear to be mobile. However, the groundwater extraction completed during the first and second phases of the injection will prevent the migration of any free product. Phase III of the proposed oxidation scenario will involve injecting a relatively small volume of hydrogen peroxide into the saturated zone. EnviroSolutions expects this volume will be too small to alter the groundwater gradients and cause contaminant migration through advection.
- EnviroSolutions will actively recover vapors from the subsurface during Phases I and II of the oxidation when the majority of oxidants are used and contaminants remediated. The vapors will be passed through a catalyst to neutralize residual ozone. Vapors will be extracted at approximately 50 cubic feet per minute (cfm). The ozone vapor flow used to treat the purged groundwater during the oxidation will be 2 cfm (vapor extraction flow of 50 cfm >> treatment vapor flow of 2 cfm). EnviroSolutions will periodically monitor subsurface vapors during Phase III of the oxidation. If elevated oxygen or explosive vapor is detected in Phase III active vapor recovery will be implemented.
- EnviroSolutions will carefully monitor subsurface conditions during the oxidation to ensure a hazardous situation is not created.

3. Groundwater Discharge Permitting Requirements

Per Michigan's Part 22 "Groundwater Quality" Rules, R 323.2210 (u) the following may be discharged without a permit.

R 323.2210 (u) Wastewater associated with an environmental response activity described in any of the following paragraphs if the discharge is to the plume of groundwater hydrocarbon constituents, including an area 100 feet hydraulically up-gradient of the edge of the plume, and any additive used in the treatment process that is not part of the hydrocarbon constituents plume meets the standards of R 323.2222

(i) A pump test discharge that does not change the physical dimensions of the plume in groundwater or, if the dimensions are changed, the changes are accounted for in the design of the final groundwater remediation plan.

(ii) A discharge for a remedial investigation, feasibility study, or remedial action discharge that is at or below the residential criteria authorized by section 20101a (1)(a) of the act, if applicable or section 21304 (a) of the act if applicable.

(iii) A discharge for a remedial investigation, feasibility study, or remedial action above residential criteria authorized by section 20101a (1)(a) of the act, if applicable or section 21304 (a) of the act if applicable, if a remedial investigation, feasibility study, or remediation plan has been approved by the department division that has compliance oversight. The remediation plan shall indicate that

the treatment system is designed and will operate so that contaminated groundwater will eventually meet the appropriate land-use based cleanup criteria authorized by section 20120a (1)(a) to (d) of the act, if applicable, or section 21304 (a) of the act, if applicable.

The first two phases of advanced oxidation proposed for former Total Station 4312 will involve pumping contaminated groundwater from extraction wells, treating the water with ozone and hydrogen peroxide, and then re-injecting the treated water into injection wells. The third phase of the proposed advanced oxidation involves slowly injecting hydrogen peroxide into the subsurface to maintain the oxidation-reduction potential or oxidizing environment created in first two phases.

EnviroSolutions does not believe advanced oxidation will result in a violation of a groundwater quality standard and that the advanced oxidation pilot test discharge is authorized under R 323.2210(u)(ii) as provided above or may be authorized under section (iii) with MDEQ approval. EnviroSolutions will verify this technology will not result in long-term violation of a groundwater quality standard during the first phase of oxidation. Envirosolutions will also carefully monitor the subsurface throughout the implementation of the advanced oxidation.

RRD Operational Memorandum 4, Item 3 1st Bullet: Description of the process, including potential by-products, partial degradation products or naturally occurring substances (metals, etc.) that may be mobilized during treatment.

Description of Treatment Process Phase I and II

Phase I and II of the advanced oxidation will involve pumping contaminated groundwater from extraction wells, treating the water with ozone and hydrogen peroxide, and then re-injecting the treated water into injection wells located within the source plume. The treatment of water with ozone and hydrogen peroxide is called "advanced oxidation." The following details each step of the treatment process:

- Contaminated groundwater is pumped from a single well during (Phase I) or multiple wells (in Phase II) bisecting the water table (please see Appendix F, Figure F.7 for well locations). Groundwater will be pumped from each well with a submersible pump at a rate of approximately 2 to 3 gpm.
- Hydrogen peroxide is pumped into a tee fitting in the groundwater stream with a metering pump. Thirty-five percent hydrogen peroxide is pumped into the groundwater stream at a rate of 10 milliliters per minute or 12.5 pounds per day (the mass of hydrogen peroxide used will be approximately 50% of the mass of ozone used).
- Ozone is pumped into the groundwater stream through a venturi. A pump that re-circulates groundwater through the venturi may be used to enhance ozone mixing.

Ozone is injected at a rate of 2 cubic feet per minute or 25 pounds per day. The ozone is produced with an electric ozone generator that utilizes liquid oxygen and nitrogen as feed gas.

- The groundwater is passed through a 15 gallon contact tank and then re-injected into a single well or multiple wells screened below the water table. Injection wells will be nested next to recovery wells. An injection well will be used only if groundwater is simultaneously extracted from the recovery well next to the injection well. Injection well screen depths will be determined based on vertical profiling of the groundwater concentrations. The injection well will be installed below the vertical extent of the plume above default Tier I Residential/Commercial I Drinking Water Criteria.
- Vapors are recovered from the recovery wells at an approximate flow rate of 50 cubic feet per minute. The vapors are recovered using a vacuum blower and passed through an ozone destruction catalyst prior to discharge to the atmosphere.
- Monitoring associated with the treatment process is discussed later in Section 6.5 of this FAR.
- The above treatment process will be implemented through a series of treatment events. Phase I will involve a 3-day treatment event. The frequency and duration of the Phase II treatment events will be determined based on the results of Phase I. EnviroSolutions estimates that Phase II will involve 55 days of treatment.

Description of Treatment Process Phase III

Phase III of the advanced oxidation will involve slowly pumping hydrogen peroxide into the subsurface to maintain the oxidation-reduction potential or oxidizing environment created in Phase I and Phase II. The following details each step of the treatment process:

- Hydrogen peroxide is periodically pumped into the extraction wells (wells bisecting the water table, please see Appendix F, Figure F.7 for well locations) used in Phase I and II. Thirty-five percent hydrogen peroxide is pumped into the groundwater stream at a maximum rate of 7 liters per day per well or 6 pounds per day per well. The frequency of the hydrogen peroxide injections will be determined based upon the change in ORP measured in monitor wells within the treatment area over time.
- Monitoring associated with the treatment process is discussed later in Section 6.5 of this FAR.

The above treatment process will be implemented through a series of treatment events. The frequency and duration of the Phase III treatment events will be determined based on the results of Phase I and Phase II and the change in ORP measured in monitor wells within the treatment area over time. EnviroSolutions estimates that Phase III will involve 12 days of treatment (1 day of treatment per week for 12 weeks).

Additives Used in the Treatment Process Phase I and Phase II

Additives used in Phase I and Phase II of the treatment process include ozone and hydrogen peroxide. Due to the consumption of ozone and peroxide during the treatment process and the speed at which ozone and hydrogen peroxide decompose, EnviroSolutions does not expect detectable levels of ozone and hydrogen peroxide to persist long after the oxidation is complete.

During Phase I and Phase II of the proposed oxidation, ozone and peroxide will first come into contact with each other and hydrocarbons in the above-ground equipment. EnviroSolutions expects the concentrations and mass of ozone and peroxide to be greatly reduced as a result of these initial reactions with each other and with hydrocarbons. During advanced oxidation, ozone destroys or oxidizes contaminants and hydroxyl radicals (produced from the reaction of ozone with hydrogen peroxide) also oxidize contaminants. Both ozone and the hydroxyl radicals are very powerful oxidants capable of treating a wide variety of chemicals. Ozone decomposes spontaneously. As ozone decomposes, it forms hydroxyl radicals. Hydrogen peroxide increases the hydroxyl radical concentrations produced from the decomposition of ozone. Ozone and hydrogen peroxide react readily with each other (this reaction is modeled as a second order reaction with respect to the ozone and peroxide concentrations and with a reaction rate constant equal to 4.5×10^{6} M^{-1} s^{-1} to 6.5×10^{6} M^{-1} s^{-1}).

The advantage of advanced oxidation is the power of ozone and hydroxyl radicals to destroy contaminants. Advanced oxidation is capable of treating a wide variety of chemicals and is less dependent on the target chemical characteristics than other remediation technologies (for example pump and treat effectiveness is dependent of chemical solubility, subsurface adsorption characteristics, free product and porous media interactions, air sparging effectiveness is dependent on chemical volatility, and bioremediation effectiveness is dependent on chemical bioavailability and the availability of electron acceptors or donors). Advanced oxidation destroys chemicals very quickly. The reaction of ozone and hydroxyl radicals with organic compounds are second order reactions (with respect to ozone, hydroxyl radical, and organic concentrations) with reaction rate constants of 10^{-5} M^{-1} s^{-1} to 10^{7} M^{-1} s^{-1} and 10^{12} M^{-1} s^{-1} to 10^{14} M^{-1} s^{-1}, respectively. For comparison, typical half-lives for the biodegradation of organic compounds are on the order of several years.

Ozone, hydrogen peroxide and hydrocarbons will react with each other in the above-ground equipment prior to the re-injection of treated water. EnviroSolutions expects majority of the additives used in the treatment process (ozone and hydrogen peroxide) to be consumed prior to re-injection of treated water into the subsurface. Any residual hydrogen peroxide or ozone present in the treated groundwater will be orders of magnitude smaller than the concentrations used to treat the pumped groundwater and

quickly de-compose into oxygen and water. The half-life for hydrogen peroxide in freshwater ranges from 8 hours to 20 days and the half-life for hydrogen peroxide in soils ranges from minutes to hours. The half-life for ozone in groundwater varies from a few minutes to approximately 30 minutes depending on the water quality.

Additives Used in the Treatment Process Phase III

Additives used in Phase III of the treatment process include hydrogen peroxide. During Phase III hydrogen peroxide will be slowly injected into the subsurface. EnviroSolutions expects the hydrogen peroxide will quickly breakdown into oxygen and water (as stated above the half-life for hydrogen peroxide in freshwater ranges from 8 hours to 20 days). EnviroSolutions does not expect detectable levels of hydrogen peroxide to persist long after the oxidation is complete.

Degradation Products and Potentially By-Products

EnviroSolutions expects that advanced oxidation will oxidize the hydrocarbons present in the saturated zone into carbon dioxide and water. Products of incomplete oxidation may include alcohols, acids, ketones and/or aldehydes. EnviroSolutions proposes to monitor for three compounds that are from these groups of chemicals and that have established cleanup criteria. EnviroSolutions proposes to collect water samples for analysis of acetaldehyde, acetone and formaldehyde per USEPA method SW 846 8315A. Samples will be collected prior to and during the proposed advanced oxidation.

Advanced oxidation treatment of groundwater may produce unwanted effects if halogen compounds are present. If bromide or chloride are present in the groundwater, it may react with ozone and hydroxyl radicals to form chlorinated or brominated compounds that are a health concern. EnviroSolutions will analyze groundwater samples from select monitor wells for chloride and bromide (per USEPA methods 320.1 and 325, respectively), prior to implementation of advanced oxidation. If concentrations of chloride or bromide are detected in these samples, follow-up monitor of select wells will include sampling and analysis of halogenated volatile organic compounds (VOCs) per USEPA method SW 846 8260.

Mobilization of Metals

The advanced oxidation pilot test will alter the redox of the saturated zone. Metals that occur naturally in more than one valence state are the most likely to be affected by changes in redox. EnviroSolutions expects that the during the advanced oxidation pilot test the saturated zone will be altered from a reducing to an oxidizing environment. Therefore, metals that are more soluble in an oxidized state or more soluble in an oxidizing environment due to reactions with other compounds are of special concern. Based upon a review of literature, EnviroSolutions determined that the common metals

most likely to be mobilized in the oxidizing environment of the pilot test include: cadmium, chromium, copper, mercury, selenium, silver and zinc. EnviroSolutions will collect and analyze groundwater samples from select wells for these metals prior to and during the advanced oxidation. The samples collected for metals analysis will also be analyzed for arsenic per the MDEQ's request. Samples will be analyzed for total metals per USEPA method SW 846 6010 or 6020. In addition, EnviroSolutions will collect samples for analysis of total iron, dissolved iron, total manganese, dissolved manganese prior to and during the advanced oxidation. Iron and manganese are common groundwater parameters that react readily with ozone and peroxide and influence the effectiveness of advanced oxidation process. Iron and manganese will be analyzed with field kits.

Michigan metals not listed in the above paragraph are either less soluble in an oxidized state (arsenic for example, however, arsenic will be analyzed in anticipation of the MDEQ's request) or not especially soluble at all (barium for example). Arsenic will be analyzed along with the metals above, because it is of special concern to groundwater quality.

Memo Item 3 2nd Bullet: Description of this technology will be protective of public health, safety and welfare, and the environment.

Ozone and ozone and peroxide are commonly used to treat municipal drinking water in the United States and Europe. EnviroSolutions has used advanced oxidation to treat purge water and in-situ at several sites. Advanced oxidation is a treatment process proven to effectively treat water containing petroleum hydrocarbons. Off-gas or vapors from process pose the greatest risk to public health, safety and welfare. EnviroSolutions will carefully monitor and sample the subsurface conditions during all phases of the proposed oxidation to ensure an un-safe condition is not created. EnviroSolutions will also actively recover and treat vapors during Phase I and Phase II of the oxidation. Finally, EnviroSolutions will also sample subsurface conditions (temperature, etc.) prior to and during the oxidation to ensure a positive impact on the environment.

Memo Item 3 3rd Bullet: Performance Monitor Plan

The performance monitor plan is detailed in Section 6.5 of this FAR.

Memo Item 3 4th Bullet: Contingency Plan

Please see Section 6.2 of this FAR for the contingency plan.

Memo Item 3 5th Bullet: Site Map

Please see the Appendix F, Figure F.7 for a site map and Appendix A, Figure 5 for a map that illustrates groundwater concentrations at the site. Please note, there are no water supply wells or surface water/wetlands near the site.

Memo Item 3 6th Bullet: Isoconcentration Maps

A table of oxidation reduction potential and dissolved oxygen concentration is included in Appendix F, Tab 8, Table F.8.

Memo Item 3 7th Bullet: Summary of facility characterization data, such as fraction organic carbon (FOC), natural oxidant demand, bulk density, porosity, permeability, and other pertinent data

The FOC, determined from the analysis of four site soil samples, ranges from less than 0.05 % to 0.3%. The bulk density, also determined from the analysis of four site soil samples, ranges from 1.616 to 1.680 grams per cubic centimeter. EnviroSolutions expects the porosity and permeability to fall within the typical ranges of these parameters for fine to medium with little silt as discussed in Section 3.4 of this FAR. EnviroSolutions will evaluate natural oxidant demand through completion of Phase I of the proposed oxidation.

Memo Item 3: 8th Bullet: The quantity, concentration and frequency of the treatment applications.

Phase I of the advanced oxidation pilot test will consist of a single 3-day treatment event. The duration and frequency of treatment during Phase II will be determined from the results of Phase I, EnviroSolutions expects Phase II will involve 55 days of treatment. During Phase I and Phase II, hydrogen peroxide will be used for treatment of water at a maximum rate of 10 milliliters per minute or 12.5 pounds per day. A 35% solution of hydrogen peroxide is used. Ozone will be used for treatment of water during Phase I and Phase II at a maximum rate of 2 cubic feet per minute or 25 pounds per day. Phase III of the oxidation will involve injecting 35% solution of hydrogen peroxide into the saturated zone. Hydrogen peroxide will be pumped into the groundwater stream at a rate of 7 liters per day per well or 6 pounds per day per well. The frequency and duration of the Phase III treatment events will be determined based on the results of Phase I and Phase II and the change in ORP measured in monitor wells within the treatment area over time. EnviroSolutions estimates that Phase III will involve 12 days of treatment (1 day of treatment per week for 12 weeks).

Memo Item 3: 9th Bullet: Mass balance calculations to estimate the required treatment concentrations and volumes.

Advanced oxidation reactions are extremely complex. EnviroSolutions estimated the mass of oxidants required based upon previous pilot tests involving remediation with advanced oxidation.

Memo Item 3: 10th Bullet: Figures demonstrating the influence of each treatment application.

EnviroSolutions completed a test of advanced oxidation at another site with very similar hydrogeology down the street from former Total Station 4312. During this test an influence of approximately 15 feet was observed. The well layout shown in Appendix F, Figure F.7 is based upon a 10 foot radius of influence. The number and locations of wells may be adjusted depending on impact observed during extraction and injection well installation and well influence observed in Phase I of the oxidation.

Memo Item 3: 11th Bullet: Scaled cross section diagrams.

Cross section diagrams are included in Appendix A, Figure 5A and 5B of this FAR.

Memo Item 3: 12th Bullet: A MSDS for each substance to be discharged.

MSDS for ozone and hydrogen peroxide are attached in Appendix F.

Memo Item 3: 13th Bullet: Identification of any safety precautions that will be taken.

Personal protective equipment (chemically resistant gloves and safety glasses) will be worn when handling the hydrogen peroxide. The hydrogen peroxide drum will be kept in secondary containment. Vapor samples of ambient air, sewer manways vapors and well vapors will be collected to monitor oxygen, explosive vapors and ozone concentrations. Vapors will be recovered from the subsurface during Phase I and II of the oxidation to prevent vapor migration. Recovered vapors will be passed through a catalyst prior to discharge to destroy any residual ozone. EnvioSolutions personnel will also wear ozone exposure badges throughout Phase I and Phase II.

4. Volume of Water Used

During the Phase I and Phase II of the proposed oxidation, only the volume of water pumped from the extraction wells will be re-injected into the subsurface. These Phases will not involve a net injection of water. During Phase III a solution of hydrogen peroxide will be injected into the subsurface at a rate of 7 liters per well per day (anticipated that the peroxide injection will occur for 1 day per week for twelve weeks).

5. QA/QC

The amount of treatment agent or additive used during the proposed oxidation will be controlled by the ozone generator and hydrogen peroxide pump settings. These settings will be checked and adjusted if necessary throughout treatment. The source water used for the treatment agents or additives is the on-site groundwater. Negative effects, such as byproducts have been discussed above.

6. Performance Monitoring

Please see Section 6.5 of this FAR for the performance monitoring plan. The monitoring plan includes wells that are horizontally and vertically distributed. Wells within the plume, up-gradient, down-gradient and side-gradient are included in the monitoring plan. The monitoring plan includes contaminants of concern, breakdown or intermediate products, byproducts, and geochemical parameters.

7. Soil Gas Monitoring

The performance monitoring plan in Section 6.5 of this FAR includes monitoring of soil gas.

8. Groundwater Monitoring Locations

Groundwater monitoring locations have been established per R 323.2224. Section 6.5 of this FAR lists the monitoring locations or wells.

9. Treatment of Monitoring Wells

The proposed oxidation will not be completed on monitoring wells.

10. Metals

Mobilization of metals is discussed in above. The performance monitoring plan includes sampling and analysis of metals that may be mobilized by the advanced oxidation pilot test.

11. Heat, Explosive Vapors and Off-Gas

As previously discussed, EnviroSolutions does not expect that the proposed oxidation will result in excessive heat, explosive vapors or off-gas in the subsurface. However, EnviroSolutions will closely monitoring groundwater temperature and subsurface vapors during the oxidation events as shown in the performance monitoring plan (Section 6.5 of this FAR). Also, EnviroSolutions will recover subsurface vapors throughout Phase I and Phase II of the proposed oxidation. These vapors will be passed through an ozone destruction catalyst to remove residual ozone prior to discharge.

12. Contingency Plan

Please see Section 6.2 of this FAR for the contingency plan.

13. Performance Monitoring

Please see Section 6.5 for the performance monitoring plan.

14: Reporting

The reporting information requested by RRD Operational Memorandum Number 4, Attachment 9 will be included after each phase of the proposed oxidation.

6.2 Contingency Plan

The corrective action is reliant on a restrictive covenants and remediation to protect human health and the environment. In the event acceptable restrictive covenant language can't be negotiated with the MDEQ and impacted parties or in the event the remediation can't be effectively completed, a contingency plan will be implemented.

The contingency plan will involve monitoring of natural attenuation. Monitoring of natural attenuation could involve quarterly gauging of product thickness and depth to groundwater and annual monitoring of the groundwater for constituents of concern (gasoline parameters). Groundwater gauging may be completed on site wells that have shown free product at some time in the past (could include MW-2, MW-3, MW-11, MW-20 and MW-21) and several perimeter wells (could include MW-1, MW-5, MW-6, MW-7, MW-8 and MW-13). Groundwater monitoring could include sampling of MW-2, MW-11, MW-1, MW-5, MW-6, MW-7, MW-8 and MW-13. The goal of this monitoring will be to show that the residual free product and the dissolved plume is not expanding and is attenuating. A revised FAR detailing this contingency plan will be submitted to the MDEQ in the event that the contingency plan must be implemented.

6.3 Air Quality Monitoring

Air quality monitoring will be completed as part of the performance monitoring as discussed in Section 6.5.

6.4 Operation and Maintenance

This FAR relies on restrictive covenants and remediation. Oxidation is the proposed remediaton technology. EnviroSolutions proposes to complete the oxidation in a series of treatment events. These events will be completed with mobile equipment instead of a permanently installed system. Maintenance associated with this mobile equipment will be completed off-site between treatment events.

6.5 Performance Monitoring

This FAR proposed remediation. The effectiveness of the remediation will be monitored and verified with the following performance monitoring plan. The following table and discussion summarizes the performance monitoring plan and includes information required by Rule 324.21309a (2) (c) (i) (iii-xii).

Performance Monitoring Plan

When Monitored	Matrix	Parameters
Prior to Phase I	Groundwater in MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, MW-8, MW-11, MW-13, MW-20, MW-21, MW-27, MW-28, MW-30, and MW-31	*COCs** pH, ORP, temperature, DO Groundwater elevation
Prior to Phase I	Groundwater in MW-1, MW-3, MW-6, MW-7, MW-8, MW-11, MW-13, and MW-27	*Intermediates** *Chloride and bromide* *Total metals** Total and dissolved Fe and Mn Hardness and alkalinity
During Phase I and II	Purge water prior to and after treatment	*COCs** pH, ORP, temperature, DO, Dissolved ozone
During Phase I and II	Recovered vapor discharge	Gasoline, Ozone and Oxygen
During All Phases	Groundwater in MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, MW-8, MW-11, MW-13 MW-20, MW-21, MW-27, MW-28, MW-30, and MW-31	*COCs** pH, ORP, temperature, DO Dissolved ozone Groundwater elevation
During All Phases	Groundwater in MW-1, MW-3, MW-6, MW-7, MW-8, MW-11, MW-13, and MW-27	*Intermediates** *Byproducts** *Total metals** Total and dissolved Fe and Mn

When Monitored	Matrix	Parameters
During All Phases	Vapor in MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, MW-8, MW-11, MW-13, MW-20, MW-21, MW-27, MW-28, MW-30, and MW-31	Pressure/vacuum Gasoline, Ozone (during Phase I and II) and Oxygen
During All Phases	Sewer manways and ambient air	Ozone (during Phase and II) and Oxygen
After Phase III	Groundwater in MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, MW-8, MW-11, MW-13, MW-20, MW-21, MW-27, MW-28, MW-30, and MW-31	Quarterly sample for: *COCs** pH, ORP, temperature, DO Groundwater elevation
After Phase III	Groundwater in MW-1, MW-3, MW-6, MW-7, MW-8, MW-11, MW-13, and MW-27	*Intermediates** *Byproducts** *Total metals** Total and dissolved Fe and Mn

Italicized parameters determined through laboratory analysis

* COCs include BTEX, MTBE, 1,2,4-TMB, 1,3,5-TMB, naphthalene & 2-methylnaphthalene

Intermediates include acetaldehyde, acetone and formaldehyde

Total metals include arsenic, cadmium, chromium, copper, mercury, selenium, silver and zinc. Byproducts include halogenated VOCs, byproducts will be analyzed if chloride or bromide detected in samples collected prior to implementation of advanced oxidation.

- Groundwater samples will be collected and analyzed per RRD Operational Memorandum 2.
- Clean containers, equipment, and materials will be used to collect each sample. Proper preservation, handling and chain of custody procedures will be followed. QA/QC samples will be collected per RRD Operational Memorandum 2 during the post-oxidation sampling.
- Monitoring data will be presented in reports submitted to the MDEQ after each phase of oxidation.
- Remediation effectiveness will be indicated by elimination of residual free product (with consideration given to water elevation). Remediation effectiveness will also be demonstrated by stable or reduced groundwater concentrations for COCs and by by-products, intermediates and metals concentrations below groundwater quality standards. Vapor samples will also be collected during the oxidation. Effectiveness will also be demonstrated through non-elevated oxygen, explosive gas and ozone in sampled vapors.

6.6 Schedules for Implementation of Corrective Action

EnviroSolutions respectfully request the MDEQ review of this FAR. Hydrocarbon constituents have migrated off-site. The site is not currently owned by the former owner/operator submitting this FAR and controls are proposed for the on-site hydrocarbon constituents. The proposed schedule for implementation is as follows.

- Record restrictive covenants with the register of deeds and submit public notices - 30 days after the MDEQ completes the final review of this FAR.
- Complete Phase I of the oxidation – 180 days after the MDEQ completes the final FAR review.
- Complete Phase II of the oxidation – 360 days after the MDEQ completes final FAR review.
- Complete Phase III of the oxidation – 540 days after the MDEQ completes the final FAR review.
- Complete performance monitoring – 1 year after completion of the oxidation.
- Submit performance monitoring reports – 60 days after completion of each phase of oxidation.
- Submit closure report – 180 days after completion of performance monitoring.

6.7 Notices and Restrictions

The corrective action relies on resource limitations. These restriction and controls will be implemented with a restrictive covenant. A draft restrictive covenant (form EQP 3854) is attached in Appendix G; Tab-1. The legal property description is located in Appendix G; Tab-2.

The following land use restrictions and resource limitations are associated with the proposed corrective action.

- Restrictive covenants preventing the potable use of site groundwater and groundwater at the site across the street.

6.7.1 Notices

Individuals or segments of the public to be provided notice of the proposed land use restrictions and resource limitations are as listed below. Copies of the notices are included in Appendix G; Tab-3 and Tab-4. A map depicting the locations of the individuals or segments of the public to be noticed is included in Appendix G; Tab-5, Figure G.1.

- Impacted Parties (form EQP 3852)
  Olson Firestone Service, Inc. (owner of former Total Station 4312)
  704 East Pickard
  Mount Pleasant, MI 48858

Harbor Bay, Inc. (owner of site across Pickard)
P.O. Box 516
Harbor Springs, MI 49470

- Local Units of Government (form EQP 3872)

Michigan Department of Transportation
1212 Corporate Drive
Mount Pleasant, MI 48858
(989) 773-7756

City of Mount Pleasant
Department of Public Works
Public Works Building
1303 North Franklin Street
Mount Pleasant, MI 48858
(989) 779-5401

Central Michigan District Health Department
Environmental Health
2012 East Preston Street
Mount Pleasant, MI 48858
(989) 773-5921

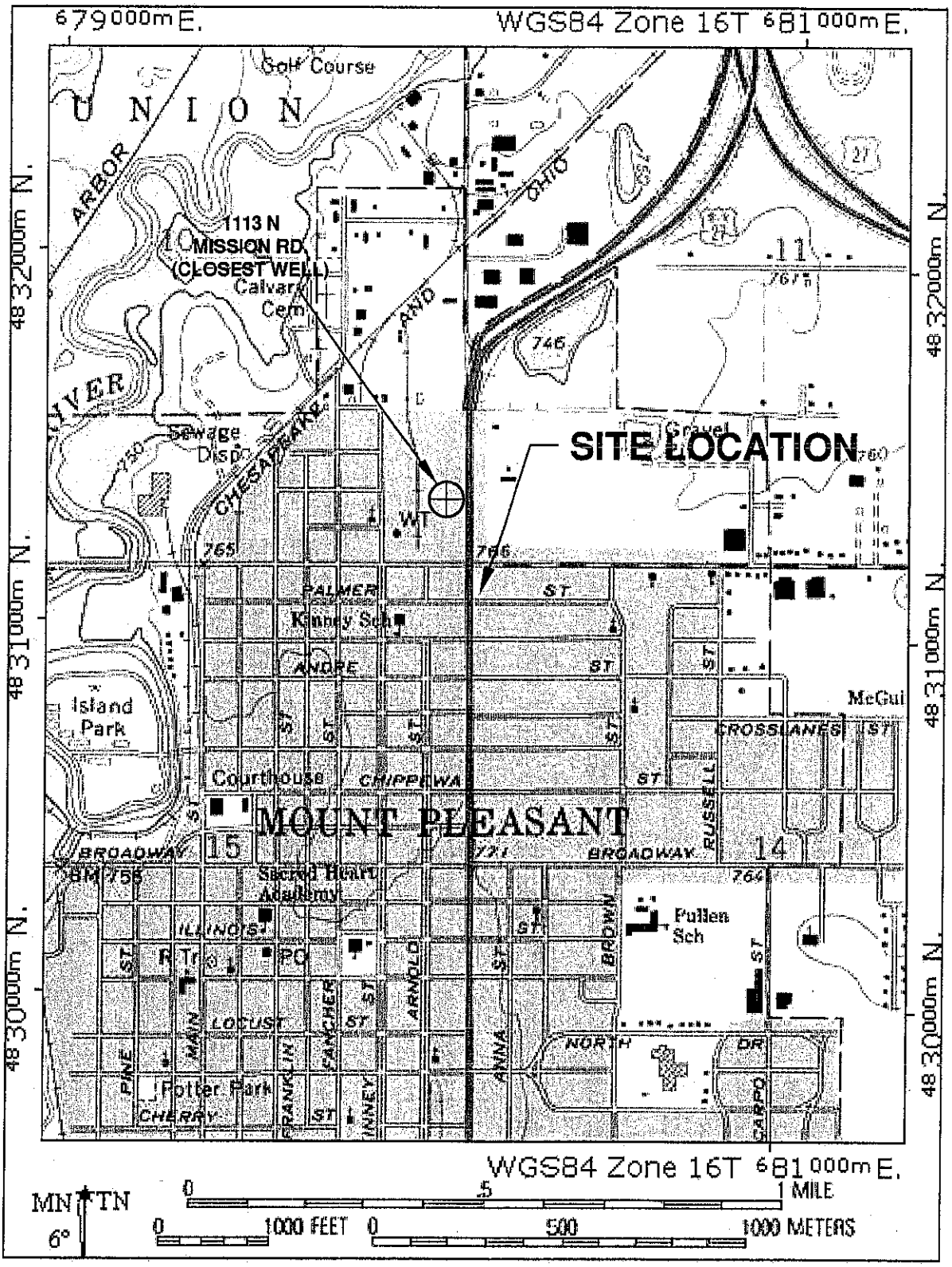
6.8 Financial Assurance Mechanism

A financial test of self assurance per Rule 29.2163a or 280.95 may be required by MDEQ. This financial assurance mechanism, if required, will be submitted to MDEQ as requested. This mechanism, if requested, will cover the following:

- Implementation of the corrective action plan, including costs to file the restrictive covenant and implement the remediation and associated performance monitoring.

6.9 Corrective Action Discharges

Discharges associated with the corrective action and associated permit requirements are discussed in detail in Section 6.1 of this FAR.



SOURCE: U.S.G.S. TOPOGRAPHIC MAP (7.5 MINUTE SERIES).

NORTH

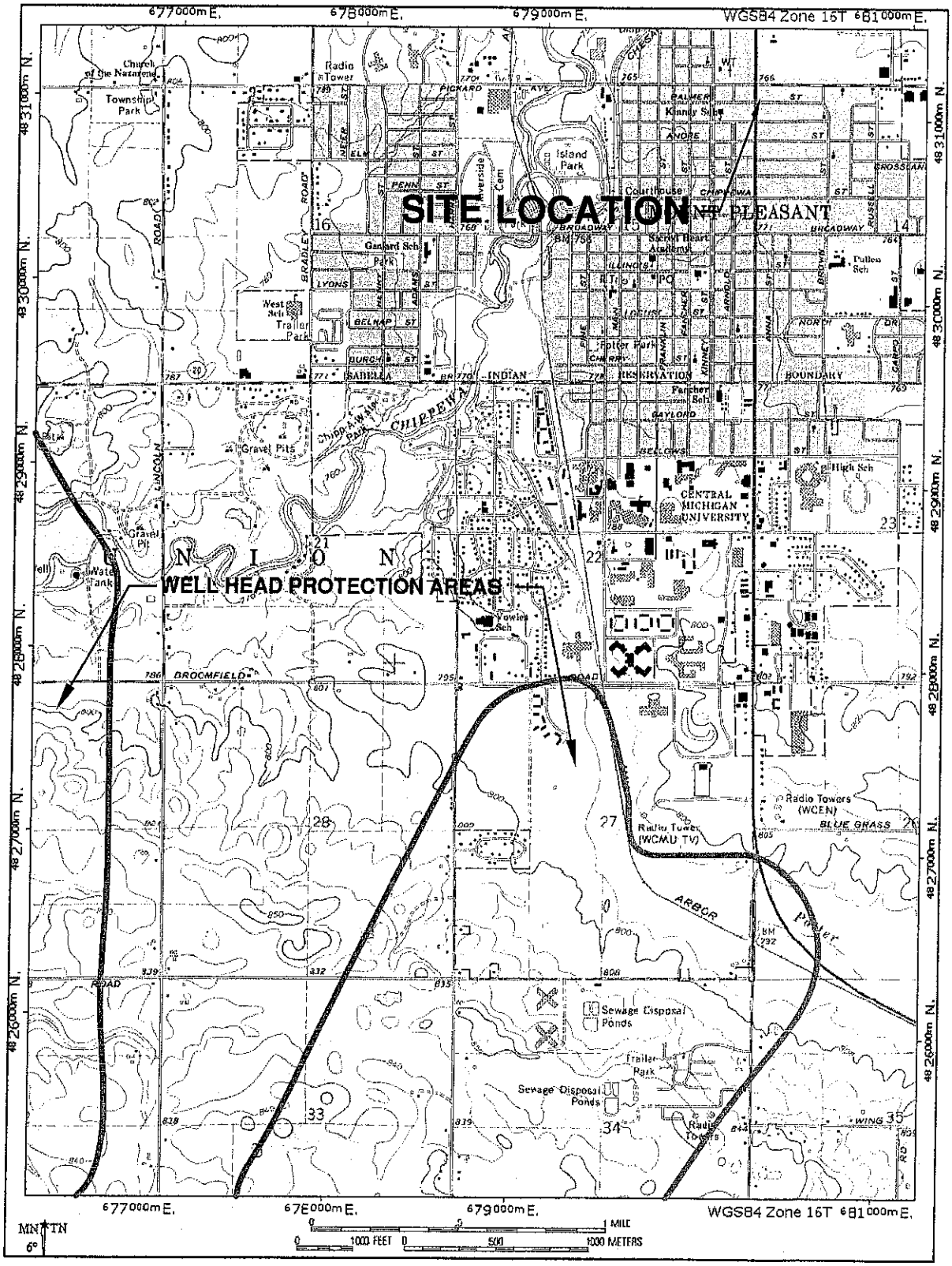
SITE LOCATION MAP

TPI PETROLEUM, INC. #4312
815 N. MISSION RD.
MOUNT PLEASANT, MICHIGAN

PROJECT NUMBER:	19-1486-06
DRAWN BY:	DAVID M. DAVIS
CHECKED BY:	ROY GANTT
SCALE:	AS SHOWN
⊕	CLOSEST WELL TO SITE

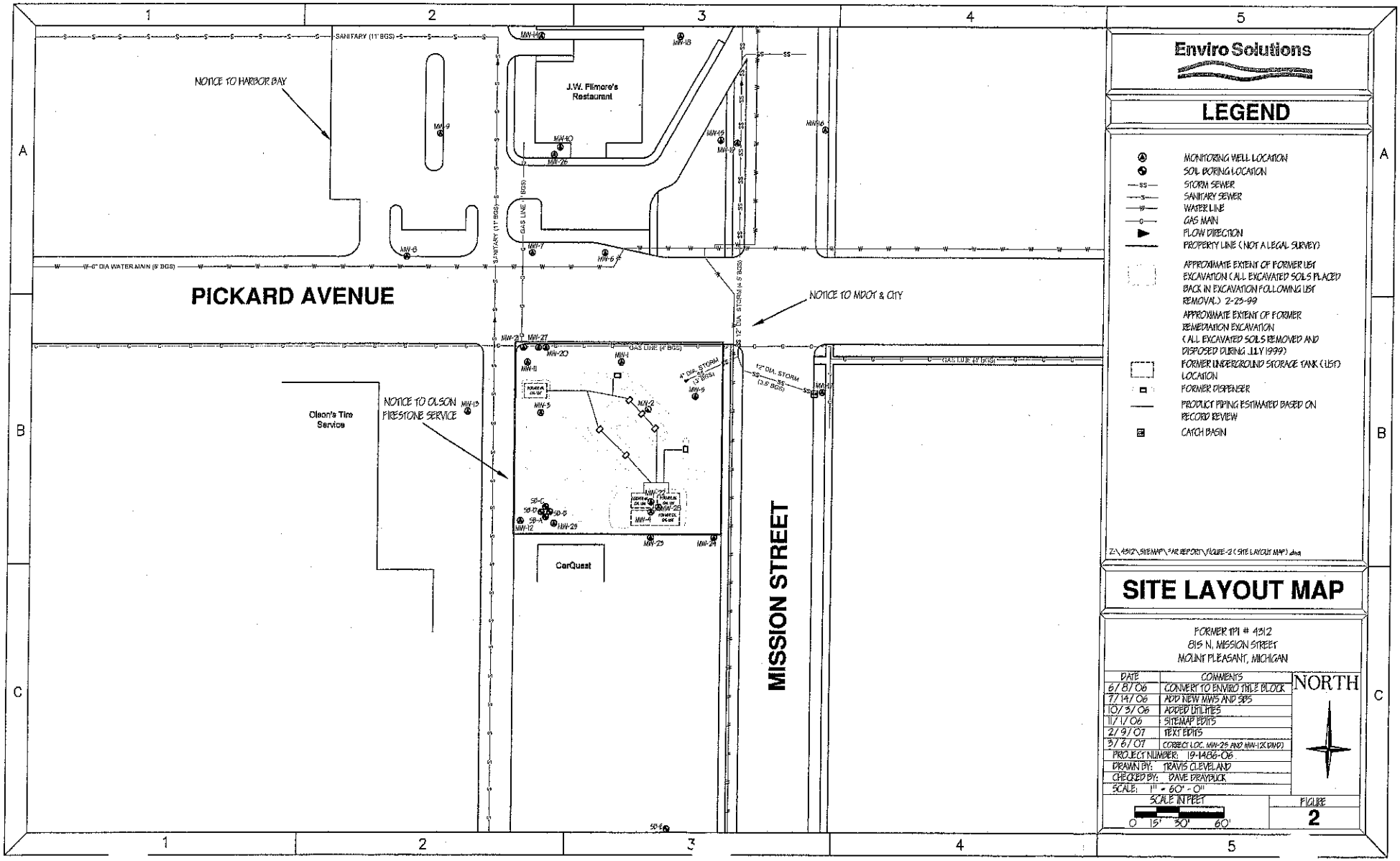
Enviro Solutions
38115 ABRUZZI DRIVE, WESTLAND
MICHIGAN 48185 (734) 641-2700

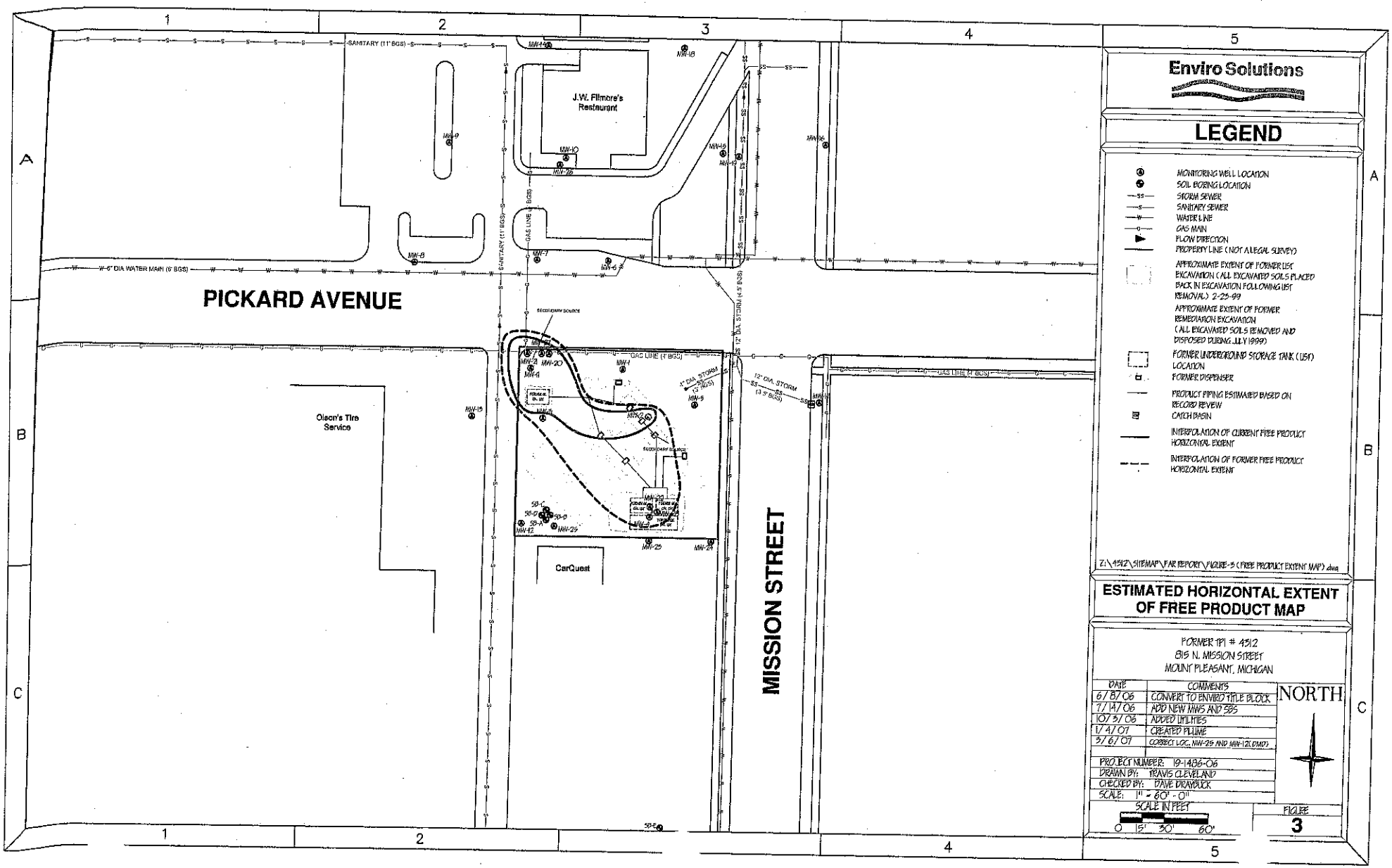
FIGURE
1



SOURCE: U.S.G.S. TOPOGRAPHIC MAP (7.5 MINUTE SERIES).

NORTH	**WELL HEAD PROTECTION MAP**	PROJECT NUMBER: 19-1486-06	Enviro Solutions
		DRAWN BY: DAVID M. DAVIS	
		CHECKED BY: ROY GANTT	38115 ABRUZZI DRIVE, WESTLAND MICHIGAN 48185 (734) 641-2700
	TPI PETROLEUM, INC. #4312 815 N. MISSION STREET MOUNT PLEASANT, MICHIGAN	SCALE: AS SHOWN	
		SCALE IN FEET	FIGURE 1A


NOTICE TO HARBOR BAY
J.W. Flimore's Restaurant
PICKARD AVENUE
NOTICE TO MDOT & CITY
NOTICE TO OLSON FIRESTONE SERVICE
Olson's Tire Service
CarQuest
MISSION STREET
SANITARY (11' BGS)
GAS LINE (4' BGS)
12" DIA. STORM (5' BGS)
12" DIA. STORM (3.5' BGS)
8" DIA WATER MAIN (5' BGS)
Enviro Solutions
LEGEND
MONITORING WELL LOCATION
SOIL BORING LOCATION
STORM SEWER
SANITARY SEWER
WATER LINE
GAS MAIN
FLOW DIRECTION
PROPERTY LINE (NOT A LEGAL SURVEY)
APPROXIMATE EXTENT OF FORMER UST EXCAVATION (ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING UST REMOVAL) 2-25-99
APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION (ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
FORMER DISPENSER
PRODUCT PIPING ESTIMATED BASED ON RECORD REVIEW
CATCH BASIN
Z:\4512\SITEMAP*AR REPORT\FIGURE-2 (SITE LAYOUT MAP).dwg
SITE LAYOUT MAP
FORMER TPI # 4512
615 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN
DATE | COMMENTS
6/8/06 | CONVERT TO ENVIRO TITLE BLOCK
7/14/06 | ADD NEW MWS AND SBS
10/3/06 | ADDED UTILITIES
11/1/06 | SITEMAP EDITS
2/9/07 | TEXT EDITS
3/6/07 | CORRECT LOC. MW-26 AND MW-12 (DWD)
PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DEBAYLOCK
SCALE: 1" = 60' - 0"
NORTH
SCALE IN FEET
0 15' 30' 60'
FIGURE 2



Enviro Solutions

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- SS — STORM SEWER
- S — SANITARY SEWER
- W — WATER LINE
- G — GAS MAIN
- FLOW DIRECTION
- PROPERTY LINE (NOT A LEGAL SURVEY)
- APPROXIMATE EXTENT OF FORMER LSF EXCAVATION (ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING LSF REMOVAL) 2-25-99
- APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION (ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
- FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
- FORMER DISPENSER
- PRODUCT PIPING ESTIMATED BASED ON RECORD REVIEW
- CATCH BASIN
- INTERPOLATION OF CURRENT FREE PRODUCT HORIZONTAL EXTENT
- INTERPOLATION OF FORMER FREE PRODUCT HORIZONTAL EXTENT

Z:\4512\SITEMAP\FAR REPORT\FIGURE-3 (FREE PRODUCT EXTENT MAP).dwg

ESTIMATED HORIZONTAL EXTENT OF FREE PRODUCT MAP

FORMER BP # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN

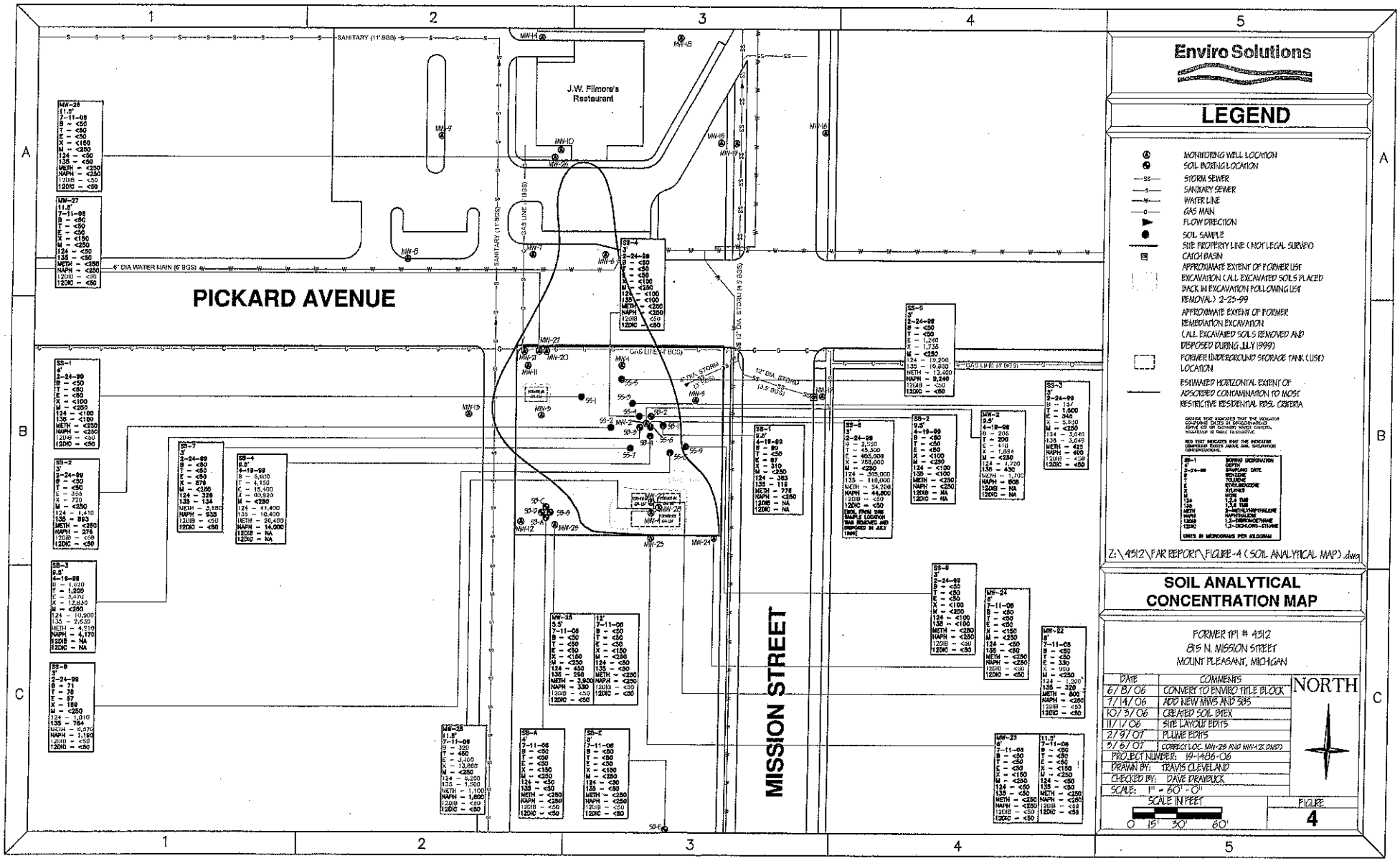
DATE	COMMENTS
6/8/06	CONVERT TO ENVIRO TITLE BLOCK
7/14/06	ADD NEW MWS AND SBS
10/31/06	ADDED UTILITIES
1/4/07	CREATED PLUME
3/6/07	CORRECT LOC. MW-28 AND MW-12 (DMD)

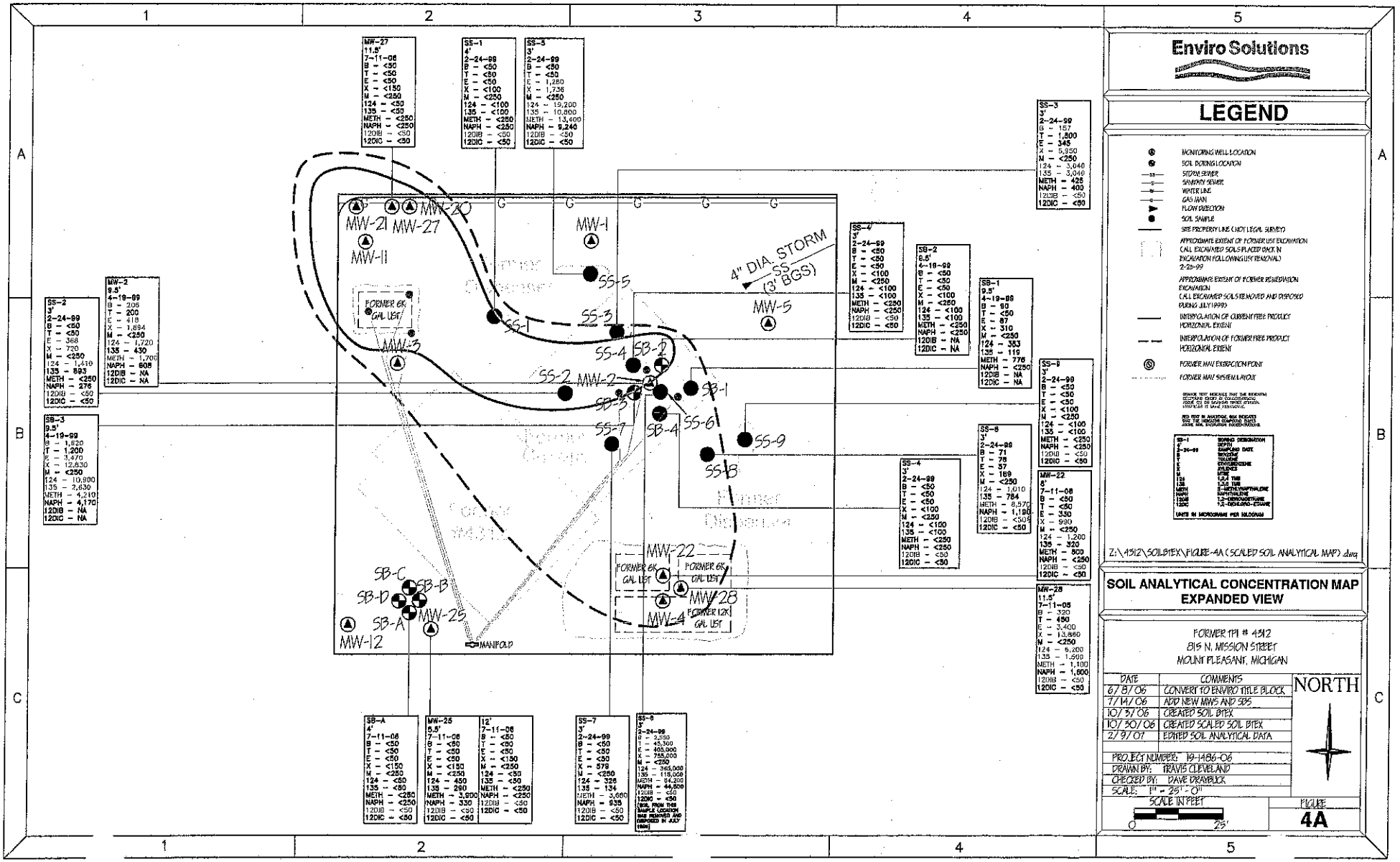
PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DRAYBUCK
SCALE: 1" = 30' - 0"

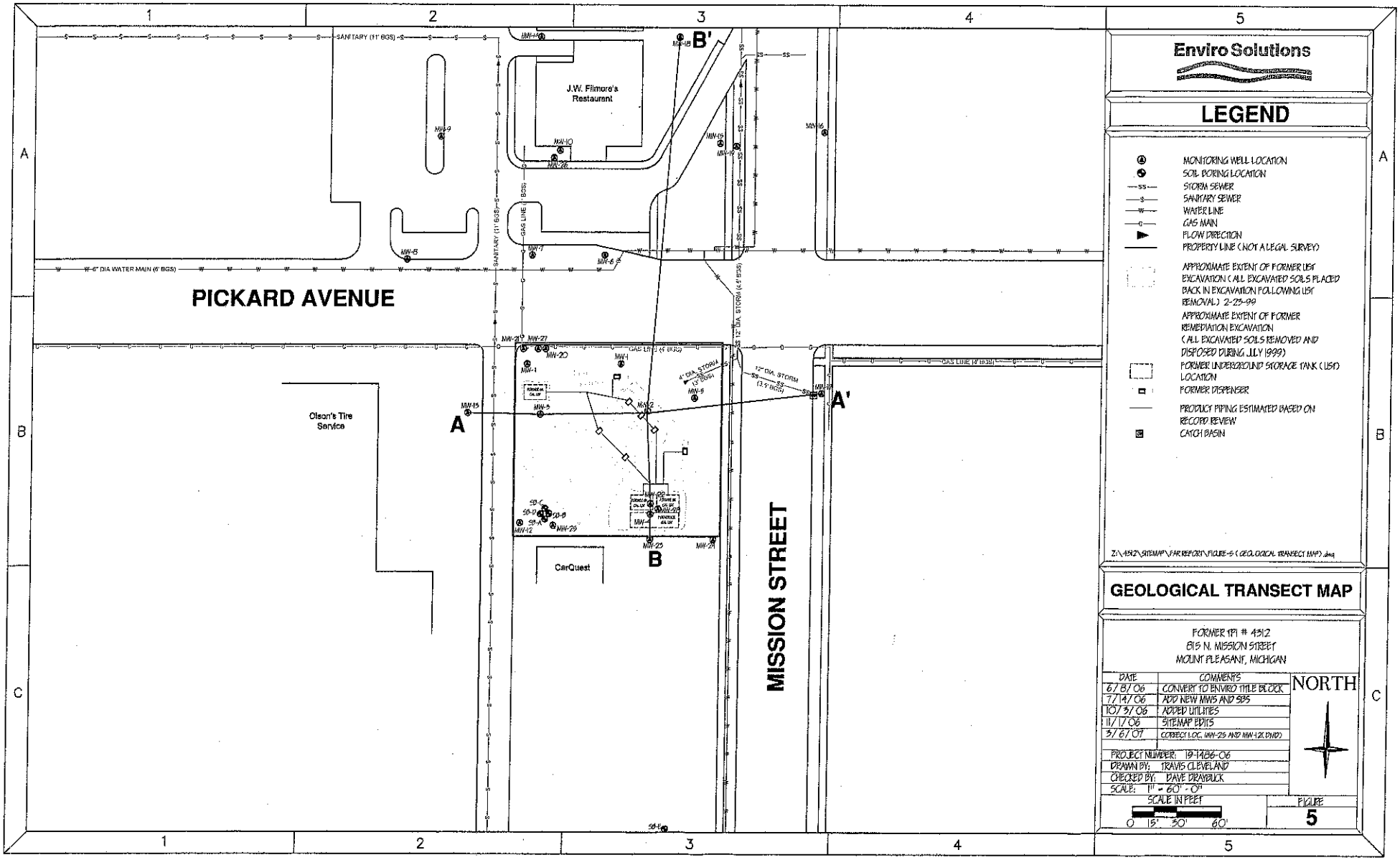
NORTH

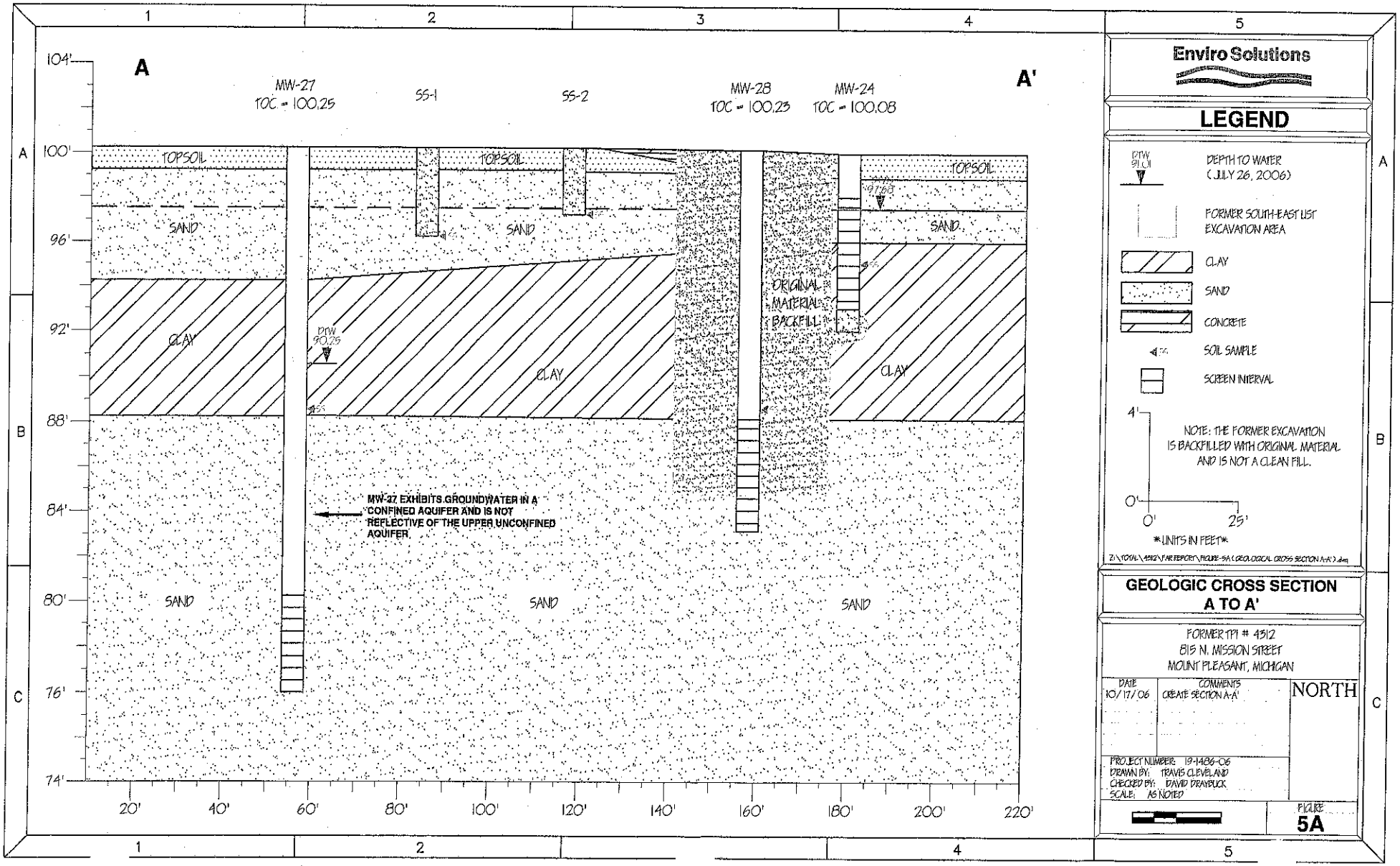
SCALE IN FEET
0 15' 30' 60'

FIGURE 3


PICKARD AVENUE
MISSION STREET
J.W. Fillmore's Restaurant
SANITARY (11' BGS)
6" DIA WATER MAIN (6' BGS)
GAS LINE (4' BGS)
12" DIA STORM (5' BGS)
Enviro Solutions
LEGEND
MONITORING WELL LOCATION
SOIL BORING LOCATION
STORM SEWER
SANITARY SEWER
WATER LINE
GAS MAIN
FLOW DIRECTION
SOIL SAMPLE
SITE PROPERTY LINE (NOT LEGAL SURVEY)
CATCH BASIN
APPROXIMATE EXTENT OF FORMER UST EXCAVATION (ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING UST REMOVAL) 2-25-99
APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION (ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
ESTIMATED HORIZONTAL EXTENT OF ADSORBED CONTAMINATION TO MOST RESTRICTIVE RESIDENTIAL RBSL CRITERIA
Z:\4512\FAR REPORT\FIGURE-4 (SOIL ANALYTICAL MAP).dwg
SOIL ANALYTICAL CONCENTRATION MAP
FORMER RP # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN
DATE
COMMENTS
6/8/06
CONVERT TO ENVIRO TITLE BLOCK
7/14/06
ADD NEW MWS AND SBS
10/3/06
CREATED SOIL PLEX
11/1/06
SITE LAYOUT EDITS
2/9/07
PLUME EDITS
5/6/07
CORRECT LOC. MW-29 AND MW-12 (DPE)
PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DRAWBACK
SCALE: 1" = 60'-0"
SCALE IN FEET
0 15' 30' 60'
NORTH
FIGURE
4


MW-27
11.5'
7-11-06
B - <50
T - <50
E - <50
X - <150
M - <250
124 - <50
135 - <50
METH - <250
NAPH - <250
12DIB - <50
12DIC - <50
SS-1
4'
2-24-99
B - <50
T - <50
E - <50
X - <100
M - <250
124 - <100
135 - <100
METH - <250
NAPH - <250
12DIB - <50
12DIC - <50
SS-3
3'
2-24-99
B - <50
T - <50
E - 1,280
X - 1,736
M - <250
124 - 19,200
135 - 10,800
METH - 13,400
NAPH - 9,240
12DIB - <50
12DIC - <50
MW-20
MW-21
MW-27
MW-11
MW-1
SS-5
SS-3
SS-1
4" DIA. STORM SS (3' BGS)
MW-5
FORMER 6K GAL UST
MW-3
SS-4
SB-2
SS-2
MW-2
SB-1
SB-3
SS-7
SB-4
SS-6
SS-9
SS-8
MW-22
FORMER 6K GAL UST
FORMER 6K GAL UST
MW-28
FORMER 12K GAL UST
MW-4
SB-C
SB-B
SB-D
SB-A
MW-25
MW-12
MANIFOLD
SS-2
3'
2-24-99
B - <50
T - <50
E - 368
X - 720
M - <250
124 - 1,410
135 - 893
METH - <250
NAPH - 276
12DIB - <50
12DIC - <50
MW-2
9.5'
4-19-99
B - 205
T - 200
E - 418
X - 1,894
M - <250
124 - 1,720
135 - 430
METH - 1,700
NAPH - 608
12DIB - NA
12DIC - NA
SB-3
9.5'
4-19-99
B - 1,820
T - 1,200
E - 3,470
X - 12,630
M - <250
124 - 10,800
135 - 2,630
METH - 4,210
NAPH - 4,170
12DIB - NA
12DIC - NA
SS-4
3'
2-24-99
B - <50
T - <50
E - <50
X - <100
M - <250
124 - <100
135 - <100
METH - <250
NAPH - <250
12DIB - <50
12DIC - <50
SS-2
6.5'
4-19-99
B - <50
T - <50
E - <50
X - <100
M - <250
124 - <100
135 - <100
METH - <250
NAPH - <250
12DIB - NA
12DIC - NA
SS-3
3'
2-24-99
B - 157
T - 1,800
E - 345
X - 5,950
M - <250
124 - 3,040
135 - 3,040
METH - 425
NAPH - 400
12DIB - <50
12DIC - <50
SB-1
9.5'
4-19-99
B - 90
T - <50
E - 87
X - 310
M - <250
124 - 383
135 - 119
METH - 775
NAPH - <250
12DIB - NA
12DIC - NA
SS-9
3'
2-24-99
B - <50
T - <50
E - <50
X - <100
M - <250
124 - <100
135 - <100
METH - <250
NAPH - <250
12DIB - <50
12DIC - <50
SS-8
3'
2-24-99
B - 71
T - 79
E - 57
X - 169
M - <250
124 - 1,610
135 - 784
METH - 8,570
NAPH - 1,190
12DIB - <50
12DIC - <50
SS-4
3'
2-24-99
B - <50
T - <50
E - <50
X - <100
M - <250
124 - <100
135 - <100
METH - <250
NAPH - <250
12DIB - <50
12DIC - <50
MW-22
6'
7-11-06
B - <50
T - <50
E - 330
X - 930
M - <250
124 - 1,200
135 - 320
METH - 800
NAPH - <250
12DIB - <50
12DIC - <50
MW-28
11.5'
7-11-06
B - 320
T - 450
E - 3,400
X - 13,880
M - <250
124 - 6,200
135 - 1,500
METH - 1,100
NAPH - 1,600
12DIB - <50
12DIC - <50
SB-A
4'
7-11-06
B - <50
T - <50
E - <50
X - <150
M - <250
124 - <50
135 - <50
METH - <250
NAPH - <250
12DIB - <50
12DIC - <50
MW-25
5.5'
7-11-06
B - <50
T - <50
E - <50
X - <150
M - <250
124 - 450
135 - 260
METH - 3,900
NAPH - 330
12DIB - <50
12DIC - <50
12'
7-11-06
B - <50
T - <50
E - <50
X - <150
M - <250
124 - <50
135 - <50
METH - <250
NAPH - <250
12DIB - <50
12DIC - <50
SS-7
3'
2-24-99
B - <50
T - <50
E - <50
X - 579
M - <250
124 - 326
135 - 134
METH - 3,660
NAPH - 935
12DIB - <50
12DIC - <50
SS-8
3'
2-24-99
B - 9,250
T - 45,300
M - 655,000
X - 755,000
M - <250
124 - 345,000
135 - 118,000
METH - 84,000
NAPH - 44,000
12DIB - <50
12DIC - <50
SOIL FROM THIS SAMPLE LOCATION WAS REMOVED AND DISPOSED IN JULY (1999)
Enviro Solutions
LEGEND
MONITORING WELL LOCATION
SOIL BORING LOCATION
STORM SEWER
SANITARY SEWER
WATER LINE
GAS MAIN
FLOW DIRECTION
SOIL SAMPLE
SITE PROPERTY LINE (NOT LEGAL SURVEY)
APPROXIMATE EXTENT OF FORMER UST EXCAVATION
(ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING UST REMOVAL) 2-23-99
APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION
(ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
INTERPOLATION OF CURRENT FREE PRODUCT HORIZONTAL EXTENT
INTERPOLATION OF FORMER FREE PRODUCT HORIZONTAL EXTENT
FORMER MW EXTRACTION POINT
FORMER MW SYSTEM LAYOUT
SOIL ANALYTICAL CONCENTRATION MAP
EXPANDED VIEW
FORMER TPI # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN
DATE
COMMENTS
6/8/06
CONVERT TO ENVIRO TITLE BLOCK
7/14/06
ADD NEW MWS AND SBS
10/3/06
CREATED SOIL BTEX
10/30/06
CREATED SCALED SOIL BTEX
2/9/07
EDITED SOIL ANALYTICAL DATA
PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DRAYBUCK
SCALE: 1" = 25' - 0"
SCALE IN FEET
0
25'
NORTH
FIGURE
4A
Z:\4512\SOILBTEX\FIGURE-4A (SCALED SOIL ANALYTICAL MAP).dwg


PICKARD AVENUE
MISSION STREET
J.W. Filmore's Restaurant
Olson's Tire Service
CarQuest
SANITARY (11' BGS)
W-6" DIA WATER MAIN (6' BGS)
GAS LINE (4' BGS)
12" DIA. STORM (4.5' BGS)
4" DIA. STORM (3' BGS)
A
A'
B
B'
MW-1
MW-2
MW-3
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-12
MW-13
MW-14
MW-15
MW-16
MW-17
MW-18
MW-19
MW-20
MW-21
MW-22
MW-23
MW-24
MW-25
MW-26
MW-27
MW-28
MW-29
SB-A
SB-B
SB-C
SB-D
SB-E
Enviro Solutions
LEGEND
MONITORING WELL LOCATION
SOIL BORING LOCATION
STORM SEWER
SANITARY SEWER
WATER LINE
GAS MAIN
FLOW DIRECTION
PROPERTY LINE (NOT A LEGAL SURVEY)
APPROXIMATE EXTENT OF FORMER UST EXCAVATION (ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING UST REMOVAL) 2-25-99
APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION (ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
FORMER DISPENSER
PRODUCT PIPING ESTIMATED BASED ON RECORD REVIEW
CATCH BASIN
Z:\4342\SITEMAP\FAR REPORT\FIGURE-5 (GEOLOGICAL TRANSECT MAP).dwg
GEOLOGICAL TRANSECT MAP
FORMER MPI # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN
DATE
COMMENTS
6/8/06
CONVERT TO ENVIRO TITLE BLOCK
7/14/06
ADD NEW MWS AND SBS
10/31/06
ADDED UTILITIES
11/17/06
SITEMAP EDITS
3/6/07
CORRECT LOG, MW-25 AND MW-12(DND)
NORTH
PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DRAYBUCK
SCALE: 1" = 60' - 0"
SCALE IN FEET
0 15' 30' 60'
FIGURE
5



Enviro Solutions

LEGEND

- DTW 91.01 — DEPTH TO WATER (JULY 26, 2006)
- FORMER SOUTH-EAST UST EXCAVATION AREA
- CLAY
- SAND
- CONCRETE
- SOIL SAMPLE
- SCREEN INTERVAL

4'

NOTE: THE FORMER EXCAVATION IS BACKFILLED WITH ORIGINAL MATERIAL AND IS NOT A CLEAN FILL.

0' 0' 25'

UNITS IN FEET

Z:\TOTAL\4512\FAR REPORT\FIGURE-5A (GEOLOGICAL CROSS SECTION A-A').dwg

GEOLOGIC CROSS SECTION A TO A'

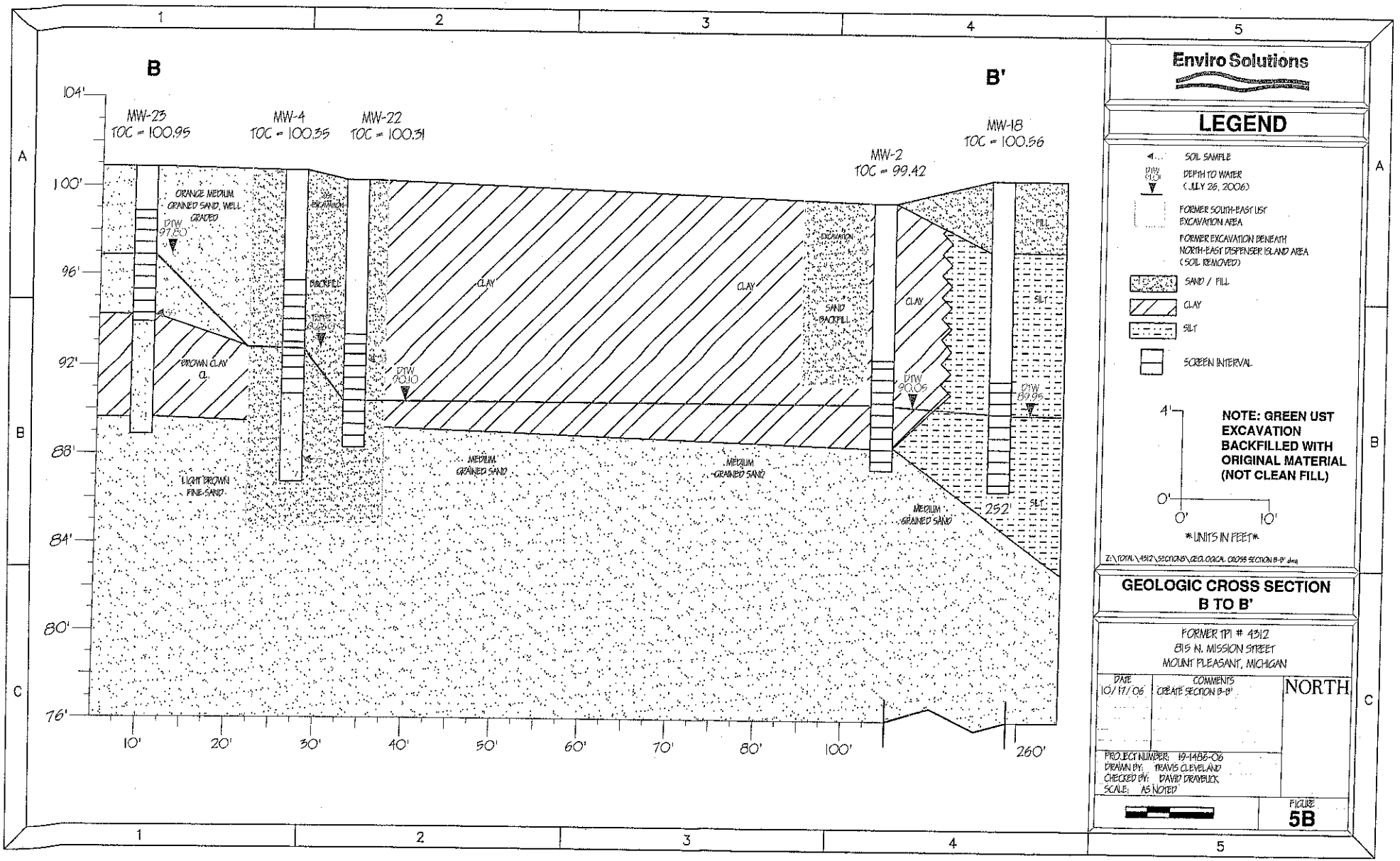
FORMER TPI # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN

DATE	COMMENTS
10/17/06	CREATE SECTION A-A'

NORTH

PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVID DEAVBUCK
SCALE: AS NOTED

FIGURE 5A



Enviro Solutions

LEGEND

- SOIL SAMPLE
- DTW 97.80 — DEPTH TO WATER (JULY 26, 2006)
- FORMER SOUTH-EAST UST EXCAVATION AREA
- FORMER EXCAVATION BENEATH NORTH-EAST DISPENSER ISLAND AREA (SOIL REMOVED)
- SAND / FILL
- CLAY
- SILT
- SCREEN INTERVAL

4' / 0' / 0' 10'

NOTE: GREEN UST EXCAVATION BACKFILLED WITH ORIGINAL MATERIAL (NOT CLEAN FILL)

UNITS IN FEET

Z:\TOPIL\4512\SECTIONS\GEOLOGICAL CROSS SECTION B-B'.dwg

GEOLOGIC CROSS SECTION B TO B'

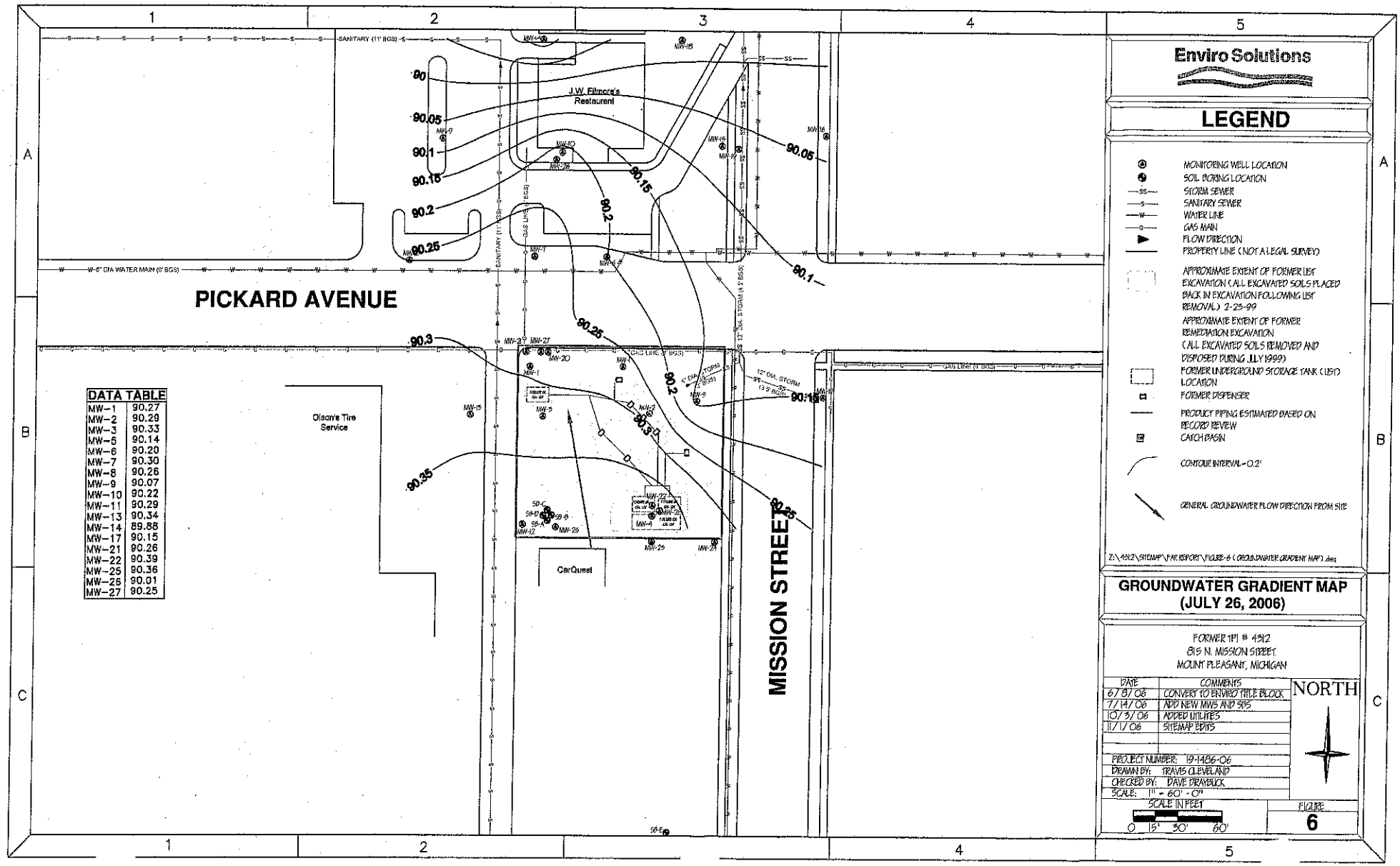
FORMER TPI # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN

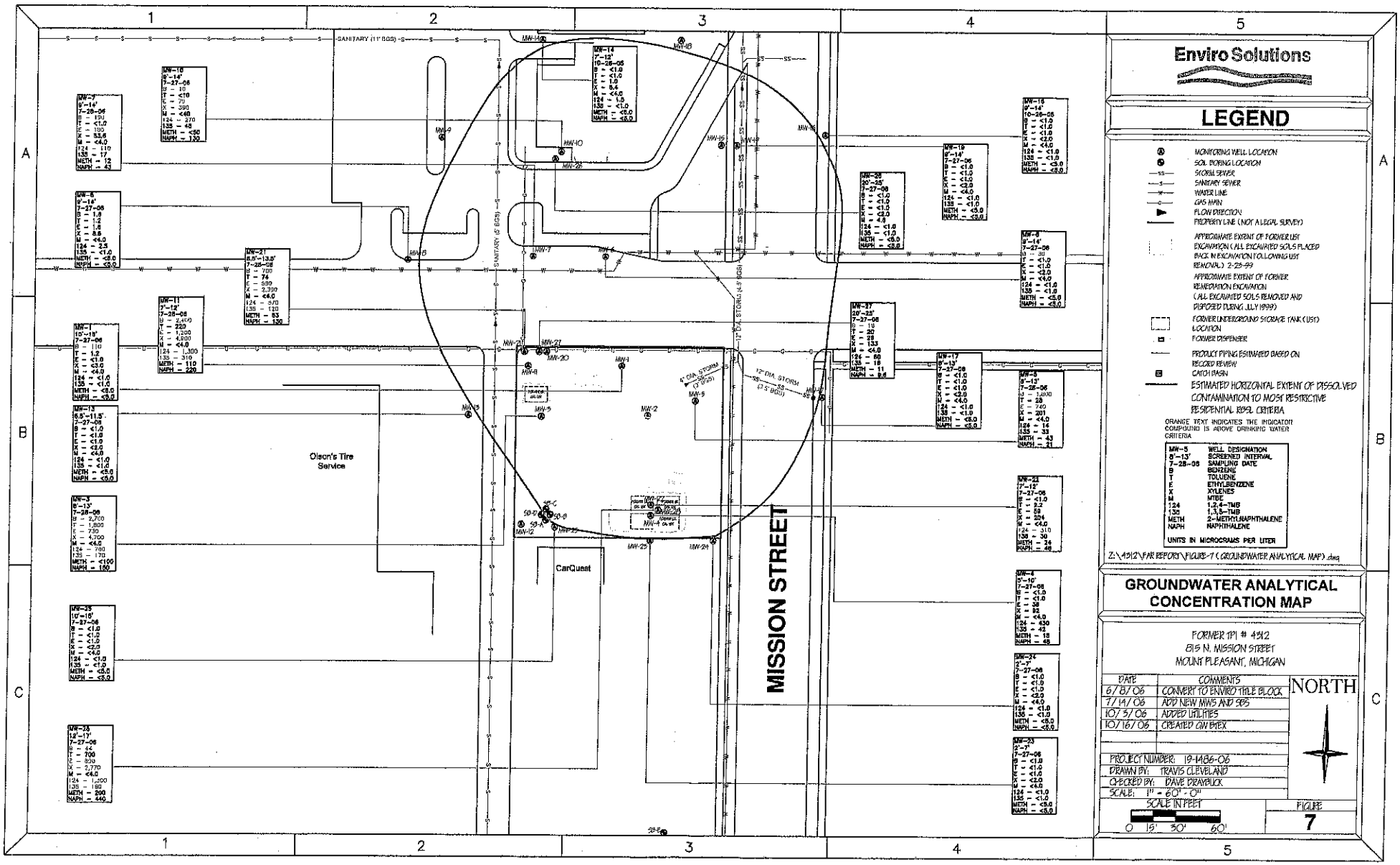
DATE	COMMENTS
10/17/06	CREATE SECTION B-B'

NORTH

PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVID DRAYBUCK
SCALE: AS NOTED

FIGURE
5B


PICKARD AVENUE
MISSION STREET
J.W. Filmore's Restaurant
Olsan's Tire Service
CarQuest
SANITARY (11' BGS)
W-6" DIA WATER MAIN (6' BGS)
GAS LINE (4' BGS)
12" DIA. STORM (13.5' BGS)
90
90.05
90.1
90.15
90.2
90.25
90.3
DATA TABLE
MW-1 90.27
MW-2 90.29
MW-3 90.33
MW-5 90.14
MW-6 90.20
MW-7 90.30
MW-8 90.26
MW-9 90.07
MW-10 90.22
MW-11 90.29
MW-13 90.34
MW-14 89.88
MW-17 90.15
MW-21 90.26
MW-22 90.39
MW-25 90.36
MW-26 90.01
MW-27 90.25
Enviro Solutions
LEGEND
MONITORING WELL LOCATION
SOIL BORING LOCATION
STORM SEWER
SANITARY SEWER
WATER LINE
GAS MAIN
FLOW DIRECTION
PROPERTY LINE (NOT A LEGAL SURVEY)
APPROXIMATE EXTENT OF FORMER LST EXCAVATION (ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING LST REMOVAL) 2-25-99
APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION (ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
FORMER DISPENSER
PRODUCT PIPING ESTIMATED BASED ON RECORD REVIEW
CATCH BASIN
CONTOUR INTERVAL = 0.2'
GENERAL GROUNDWATER FLOW DIRECTION FROM SITE
Z:\4512\SITEMAP\FAR REPORT\FIGURE-6 (GROUNDWATER GRADIENT MAP).dwg
GROUNDWATER GRADIENT MAP
(JULY 26, 2006)
FORMER TPI # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN
DATE COMMENTS
6/ 8/ 06 CONVERT TO ENVIRO TITLE BLOCK
7/ 14/ 06 ADD NEW MWS AND SBS
10/ 3/ 06 ADDED UTILITIES
11/ 1/ 06 SITEMAP EDITS
PROJECT NUMBER: 19-1456-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DRAYBUCK
SCALE: 1" = 60' - 0"
SCALE IN FEET
0 15' 30' 60'
NORTH
FIGURE
6



Enviro Solutions

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- STORM SEWER
- SANITARY SEWER
- WATER LINE
- GAS MAIN
- FLOW DIRECTION
- PROPERTY LINE (NOT A LEGAL SURVEY)
- APPROXIMATE EXTENT OF FORMER UST EXCAVATION (ALL EXCAVATED SOILS PLACED BACK IN EXCAVATION FOLLOWING UST REMOVAL) 2-23-93
- APPROXIMATE EXTENT OF FORMER REMEDIATION EXCAVATION (ALL EXCAVATED SOILS REMOVED AND DISPOSED DURING JULY 1999)
- FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
- FORMER DISPENSER
- PRODUCT PIPING ESTIMATED BASED ON RECORD REVIEW
- CATCH BASIN
- ESTIMATED HORIZONTAL EXTENT OF DISSOLVED CONTAMINATION TO MOST RESTRICTIVE RESIDENTIAL RRSL CRITERIA

ORANGE TEXT INDICATES THE INDICATOR COMPOUND IS ABOVE DRINKING WATER CRITERIA

MW-5	WELL DESIGNATION
8'-13'	SCREENED INTERVAL
7-28-06	SAMPLING DATE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES
M	MTBE
124	1,2,4-TMB
135	1,3,5-TMB
METH	2-METHYLNAPHTHALENE
NAPH	NAPHTHALENE

UNITS IN MICROGRAMS PER LITER

Z:\4512\FAR REPORT\FIGURE-7 (GROUNDWATER ANALYTICAL MAP) .dwg

GROUNDWATER ANALYTICAL CONCENTRATION MAP

FORMER TPI # 4512
815 N. MISSION STREET
MOUNT PLEASANT, MICHIGAN

DATE	COMMENTS
6/8/06	CONVERT TO ENVIRO TITLE BLOCK
7/11/06	ADD NEW MWS AND SBS
10/5/06	ADDED UTILITIES
10/16/06	CREATED GW INDEX

NORTH

PROJECT NUMBER: 19-1486-06
DRAWN BY: TRAVIS CLEVELAND
CHECKED BY: DAVE DRAYBUCK
SCALE: 1" = 60' - 0"

SCALE IN FEET
0 15' 30' 60'

FIGURE 7

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product	Depth to Water	Free Product Thickness	Free Product Recovered	Groundwater Recovered	Product/Water Mixture Recovered
		(feet)	*(feet)*	*(feet)*	*(gallons)*	*(gallons)*	*(gallons)*
MW-1	1/13/2004	ND	10.17		0.00	0.00	0.00
Screened Interval	2/24/2004	ND	10.08		0.00	0.00	0.00
(10' - 15')	3/10/2004	ND	9.43		0.00	0.00	0.00
	4/7/2004	ND	9.33		0.00	0.00	0.00
	5/12/2004	ND	9.32		0.00	0.00	0.00
	6/9/2004	ND	9.18		0.00	0.00	0.00
	7/9/2004	ND	9.37		0.00	0.00	0.00
	8/13/2004	ND	9.66		0.00	0.00	0.00
	9/10/2004	ND	9.86		0.00	0.00	0.00
	10/27/2004	ND	10.21		0.00	0.00	0.00
	11/16/2004	ND	10.24		0.00	0.00	0.00
	12/9/2004	ND	10.03		0.00	0.00	0.00
	1/4/2005	ND	10.06		0.00	0.00	0.00
	2/28/2005	ND	INACCESSIBLE		0.00	0.00	0.00
	3/25/2005	ND	9.93		0.00	0.00	0.00
	4/25/2005	ND	9.66		0.00	0.00	0.00
	5/9/2005	ND	9.98		0.00	0.00	0.00
	6/3/2005	ND	10.20		0.00	0.00	0.00
	7/5/2005	ND	9.79		0.00	0.00	0.00
	8/2/2005	ND	9.65		0.00	0.00	0.00
	9/8/2005	ND	9.97		0.00	0.00	0.00
	10/26/2005	ND	10.45		0.00	0.00	0.00
	11/28/2005	ND	9.98		0.00	0.00	0.00
	12/7/2005	ND	10.21		0.00	0.00	0.00
	7/26/2006	ND	9.73		0.00	0.00	0.00

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product (feet)	Depth to Water (feet)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Groundwater Recovered (gallons)	Product/Water Mixture Recovered (gallons)
MW-2	6/20/2000	10.89	11.25	0.36	0.00	0.00	0.00
Screened Interval	9/20/2000	9.32	11.03	1.71	0.00	0.00	0.00
(7' - 12')	9/21/2000	9.32	11.03	1.71	NA	NA	625.00
	11/1/2000	9.56	11.35	1.79	NA	NA	706.00
	12/20/2000	9.51	10.30	0.79	NA	NA	485.00
	1/24/2001	9.61	11.32	1.71	NA	NA	447.00
	2/27/2001	9.06	9.23	0.17	NA	NA	310.00
	3/22/2001	9.31	9.58	0.27	NA	NA	270.00
	4/24/2001	9.22	9.30	0.08	NA	NA	284.00
	5/30/2001	ND	8.76		NA	NA	451.00
	6/27/2001	8.92	9.09	0.17	NA	NA	356.00
	7/26/2001	9.10	9.37	0.27	NA	NA	356.00
	8/30/2001	8.78	8.80	0.02	NA	NA	456.00
	9/27/2001	9.00	9.11	0.11	NA	NA	501.00
	10/25/2001				NA	NA	456.00
	11/27/2001	9.11	9.17	0.06	NA	NA	493.00
	12/18/2001	9.03	9.11	0.08	NA	NA	367.00
	1/22/2002	9.22	9.24	0.02	NA	NA	256.00
	2/21/2002	ND	9.23		NA	NA	291.00
	3/20/2002	ND	8.61		NA	NA	585.00
	4/25/2002	ND	8.62		NA	NA	0.00
	5/29/2002	ND	8.61		NA	NA	0.00
	6/11/2002	ND	8.72		NA	NA	0.00
	7/31/2002	8.99	9.04	0.05	NA	NA	0.00
	8/27/2002	9.42	9.45	0.03	NA	NA	697.00
	9/25/2002	9.31	9.42	0.11	NA	NA	780.00
	10/29/2002	9.57	9.62	0.05	NA	NA	320.00
	11/25/2002	9.40	10.28	0.88	NA	NA	104.00
	12/11/2002	9.46	10.11	0.65	NA	NA	258.00
	1/16/2003	9.70	11.24	1.54	NA	NA	208.00
	2/17/2003	9.65	11.38	1.73	NA	NA	421.00
	2/18/2003	ND	9.98		NA	NA	538.00
	3/26/2003	9.94	10.47	0.53	NA	NA	452.00
	3/27/2003	9.98	10.11	0.13	NA	NA	0.00
	4/29/2003	9.60	10.50	0.90	NA	NA	204.00
	4/30/2003	9.74	9.85	0.11	NA	NA	138.00
	5/16/2003	9.26	9.34	0.08	NA	NA	257.00
	6/26/2003	9.23	9.28	0.05	NA	NA	314.00
	7/14/2003	9.14	9.17	0.03	NA	NA	242.00
	8/5/2003	9.25	9.33	0.08	NA	NA	0.00
	8/26/2003	9.28	9.51	0.23	NA	NA	90.00
	9/16/2003	9.32	10.14	0.82	NA	NA	216.00
	10/13/2003	9.40	10.30	0.90	0.00	0.00	0.00
	11/10/2003	9.34	9.42	0.08	0.00	0.00	0.00
	12/8/2003	9.29	9.30	0.01	0.00	0.00	0.00
	1/13/2004	ND	9.34		0.00	0.00	0.00
	2/24/2004	ND	9.40		0.00	0.00	0.00
	3/10/2004	ND	8.82		0.00	0.00	0.00
	4/7/2004	ND	8.75		0.00	0.00	0.00
	5/12/2004	ND	8.71		0.00	0.00	0.00
	6/9/2004	ND	8.59		0.00	0.00	0.00
	7/9/2004	ND	8.82		0.00	0.00	0.00
	8/13/2004	ND	9.05		0.00	0.00	0.00
	9/10/2004	ND	9.17		0.00	0.00	0.00
	10/27/2004	ND	9.67		0.00	0.00	0.00
	11/16/2004	9.55	9.79	0.24	0.01	Unknown	0.00
	12/9/2004	1.91	10.07	8.16	0.07	Unknown	0.00
	1/4/2005	9.48	9.95	0.47	0.05	Unknown	0.00
	2/28/2005		INACCESSIBLE		0.00	0.00	0.00
	3/25/2005	9.25	9.48	0.23	0.04	Unknown	0.00
	4/25/2005	ND	9.04		0.00	0.00	0.00
	5/9/2005	9.44	9.67	0.23	0.04	Unknown	0.00
	6/3/2005	9.98	10.42	0.44	0.07	Unknown	0.00
	7/5/2005	ND	9.24		0.00	0.00	0.00
	8/2/2005	ND	9.08		0.00	0.00	0.00
	9/8/2005	9.27	9.91	0.64	0.06	Unknown	0.00
	10/26/2005	9.55	11.19	1.64	0.33	Unknown	0.00
	11/28/2005	9.41	10.06	0.65	0.07	Unknown	0.00
	12/7/2005	9.59	10.80	1.21	0.23	Unknown	0.00
	2/8/2006	9.21	9.23	0.02	0.05	0.25	0.00
	7/26/2006	9.12	9.15	0.03	0.05	0.25	0.00

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product (feet)	Depth to Water (feet)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Groundwater Recovered (gallons)	Product/Water Mixture Recovered (gallons)
MW-3 Screened Interval (8' - 13')	**6/20/2000**	**10.47**	**11.03**	**0.56**	**NA**	**NA**	**0.00**
	9/20/2000	**10.16**	**10.96**	**0.80**	**NA**	**NA**	**0.00**
	9/21/2000	**10.16**	**10.96**	**0.80**	**NA**	**NA**	**625.00**
	11/1/2000	**10.80**	**12.05**	**1.25**	**NA**	**NA**	**707.00**
	12/20/2000	**10.76**	**11.78**	**1.02**	**NA**	**NA**	**485.00**
	1/24/2001	**10.83**	**12.02**	**1.19**	**NA**	**NA**	**448.00**
	2/27/2001	**10.28**	**10.36**	**0.08**	**NA**	**NA**	**495.00**
	3/22/2001	**10.44**	**10.48**	**0.04**	**NA**	**NA**	**270.00**
	4/24/2001	**10.34**	**10.38**	**0.04**	**NA**	**NA**	**284.00**
	5/30/2001	**9.87**	**9.89**	**0.02**	**NA**	**NA**	**452.00**
	6/27/2001	ND	9.98		NA	NA	357.00
	7/26/2001	**10.25**	**10.26**	**0.01**	**NA**	**NA**	**357.00**
	8/30/2001	ND	10.20		NA	NA	456.00
	9/27/2001	ND	10.16		NA	NA	502.00
	10/25/2001	ND	10.06		NA	NA	456.00
	11/27/2001	ND	10.25		NA	NA	492.00
	12/18/2001	ND	10.17		NA	NA	367.00
	1/22/2002	ND	10.33		NA	NA	256.00
	2/21/2002	ND	10.41		NA	NA	290.00
	3/20/2002	ND	9.71		NA	NA	0.00
	4/25/2002	ND	9.75		NA	NA	0.00
	5/29/2002	ND	9.73		NA	NA	0.00
	6/11/2002	ND	9.84		NA	NA	0.00
	7/31/2002	ND	10.11		NA	NA	0.00
	8/27/2002	ND	10.18		NA	NA	0.00
	9/25/2002	ND	10.47		NA	NA	400.00
	10/29/2002	ND	10.43		NA	NA	320.00
	11/25/2002	ND	10.65		NA	NA	105.00
	12/11/2002	ND	10.14		NA	NA	0.00
	1/16/2003	ND	11.14		NA	NA	0.00
	2/17/2003	**11.10**	**11.11**	**0.01**	**NA**	**NA**	**0.00**
	2/18/2003	**11.08**	**11.09**	**0.01**	**NA**	**NA**	**0.00**
	3/26/2003	**11.10**	**11.19**	**0.09**	**NA**	**NA**	**0.00**
	3/27/2003	**11.17**	**11.26**	**0.09**	**NA**	**NA**	**0.00**
	4/29/2003	**10.78**	**10.85**	**0.07**	**NA**	**NA**	**204.00**
	4/30/2003	**10.79**	**10.81**	**0.02**	**NA**	**NA**	**207.00**
	5/16/2003	ND	10.37		NA	NA	257.00
	6/26/2003	**10.32**	**10.32**	**0.00**	**NA**	**NA**	**314.00**
	7/14/2003	ND	10.27		NA	NA	243.00
	8/5/2003	ND	10.29		NA	NA	0.00
	8/26/2003	ND	10.47		NA	NA	90.00
	9/16/2003	**10.56**	**10.57**	**0.01**	**NA**	**NA**	**144.00**
	10/13/2003	**10.67**	**10.70**	**0.03**	**Unknown**	**Unknown**	**Unknown**
	11/10/2003	**10.48**	**10.52**	**0.04**	**Unknown**	**Unknown**	**Unknown**
	12/8/2003	ND	10.42		Unknown	Unknown	Unknown
	1/13/2004	ND	10.26		0.00	0.00	0.00
	2/24/2004	ND	10.50		0.00	0.00	0.00
	3/10/2004	ND	9.96		0.00	0.00	0.00
	4/7/2004	ND	9.85		0.00	0.00	0.00
	5/12/2004	ND	9.71		0.00	0.00	0.00
	6/9/2004	ND	9.68		0.00	0.00	0.00
	7/9/2004	ND	9.90		0.00	0.00	0.00
	8/13/2004	ND	10.09		0.00	0.00	0.00
	9/10/2004	ND	10.26		0.00	0.00	0.00
	10/27/2004	ND	10.71		0.00	0.00	0.00
	11/16/2004	ND	10.69		0.00	0.00	0.00
	12/9/2004	ND	9.56		0.00	0.00	0.00
	1/4/2005	ND	11.34		0.00	0.00	0.00
	2/28/2005	ND	10.41		0.00	0.00	0.00
	3/25/2005	ND	10.32		0.00	0.00	0.00
	4/25/2005	ND	10.08		0.00	0.00	0.00
	6/3/2005	ND	10.59		0.00	0.00	0.00
	8/2/2005	ND	10.16		0.00	0.00	0.00
	9/8/2005	ND	10.44		0.00	0.00	0.00
	10/26/2005	ND	10.90		0.00	0.00	0.00
	11/28/2005	ND	10.60		0.00	0.00	0.00
	12/7/2005	ND	10.77		0.00	0.00	0.00
	7/26/2006	ND	10.21		0.00	0.00	0.00

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product (feet)	Depth to Water (feet)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Groundwater Recovered (gallons)	Product/Water Mixture Recovered (gallons)
MW-4 Screened Interval (9' - 14')	1/13/2004	ND	8.77		0.00	0.00	0.00
	2/24/2004	ND	INACCESSIBLE		0.00	0.00	0.00
	3/10/2004	ND	INACCESSIBLE		0.00	0.00	0.00
	4/7/2004	ND	8.05		0.00	0.00	0.00
	5/12/2004	ND	7.03		0.00	0.00	0.00
	6/9/2004	ND	8.20		0.00	0.00	0.00
	7/9/2004	ND	8.49		0.00	0.00	0.00
	8/13/2004	ND	9.29		0.00	0.00	0.00
	9/10/2004	ND	9.18		0.00	0.00	0.00
	10/27/2004	ND	DRY		0.00	0.00	0.00
	11/16/2004	ND	9.00		0.00	0.00	0.00
	12/9/2004	ND	--		0.00	0.00	0.00
	1/4/2005	ND	--		0.00	0.00	0.00
	2/28/2005	ND	--		0.00	0.00	0.00
	3/25/2005	ND	--		0.00	0.00	0.00
	4/25/2005	ND	DRY		0.00	0.00	0.00
	5/9/2005	ND	8.87		0.00	0.00	0.00
	6/3/2005	ND	9.01		0.00	0.00	0.00
	7/5/2005	ND	8.47		0.00	0.00	0.00
	8/2/2005	ND	8.13		0.00	0.00	0.00
	9/8/2005	ND	9.10		0.00	0.00	0.00
	10/26/2005	ND	9.35		0.00	0.00	0.00
	11/28/2005	ND	8.80		0.00	0.00	0.00
	12/7/2005	ND	8.68		0.00	0.00	0.00
	7/26/2006	ND	8.06		0.00	0.00	0.00
MW-5 Screened Interval (9' - 14')	1/13/2004	ND	10.27		0.00	0.00	0.00
	2/24/2004	ND	10.19		0.00	0.00	0.00
	3/10/2004	ND	9.45		0.00	0.00	0.00
	4/7/2004	ND	9.42		0.00	0.00	0.00
	5/12/2004	ND	9.44		0.00	0.00	0.00
	6/9/2004	ND	9.31		0.00	0.00	0.00
	7/9/2004	ND	9.49		0.00	0.00	0.00
	8/13/2004	ND	9.78		0.00	0.00	0.00
	9/10/2004	ND	9.97		0.00	0.00	0.00
	10/27/2004	ND	10.33		0.00	0.00	0.00
	11/16/2004	ND	10.41		0.00	0.00	0.00
	12/9/2004	ND	10.21		0.00	0.00	0.00
	1/4/2005	ND	10.25		0.00	0.00	0.00
	2/28/2005	ND	10.17		0.00	0.00	0.00
	3/25/2005	ND	10.11		0.00	0.00	0.00
	4/25/2005	ND	9.85		0.00	0.00	0.00
	5/9/2005	ND	10.25		0.00	0.00	0.00
	6/3/2005	ND	10.40		0.00	0.00	0.00
	7/5/2005	ND	9.92		0.00	0.00	0.00
	8/2/2005	ND	9.79		0.00	0.00	0.00
	9/8/2005	ND	10.12		0.00	0.00	0.00
	10/26/2005	ND	10.68		0.00	0.00	0.00
	11/28/2005	ND	10.14		0.00	0.00	0.00
	12/7/2005	ND	10.43		0.00	0.00	0.00
	7/26/2006	ND	9.95		0.00	0.00	0.00

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product (feet)	Depth to Water (feet)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Groundwater Recovered (gallons)	Product/Water Mixture Recovered (gallons)
MW-7	1/13/2004	ND	9.90		0.00	0.00	0.00
Screened Interval	2/24/2004	ND	9.79		0.00	0.00	0.00
(9' - 14')	3/10/2004	ND	9.18		0.00	0.00	0.00
	4/7/2004	ND	9.15		0.00	0.00	0.00
	5/12/2004	ND	9.14		0.00	0.00	0.00
	6/9/2004	ND	9.04		0.00	0.00	0.00
	7/9/2004	ND	9.20		0.00	0.00	0.00
	8/13/2004	ND	9.45		0.00	0.00	0.00
	9/10/2004	ND	9.83		0.00	0.00	0.00
	10/27/2004	ND	10.18		0.00	0.00	0.00
	11/16/2004	ND	9.96		0.00	0.00	0.00
	12/9/2004	ND	9.71		0.00	0.00	0.00
	1/4/2005	ND	9.74		0.00	0.00	0.00
	2/28/2005	ND	INACCESSIBLE		0.00	0.00	0.00
	3/25/2005	ND	9.70		0.00	0.00	0.00
	4/25/2005	ND	9.45		0.00	0.00	0.00
	5/9/2005	ND	9.72		0.00	0.00	0.00
	6/3/2005	ND	9.88		0.00	0.00	0.00
	7/5/2005	ND	9.54		0.00	0.00	0.00
	8/2/2005	ND	9.40		0.00	0.00	0.00
	9/8/2005	ND	9.74		0.00	0.00	0.00
	10/26/2005	ND	10.10		0.00	0.00	0.00
	11/28/2005	ND	9.75		0.00	0.00	0.00
	12/7/2005	ND	9.86		0.00	0.00	0.00
	7/26/2006	ND	9.37		0.00	0.00	0.00
MW-10	3/20/2000	ND	11.72		0.00	0.00	0.00
Screened Interval	6/20/2000	ND	11.58		0.00	0.00	0.00
(9' - 14')	**9/20/2000**	**11.92**	**11.94**	**0.02**	**NA**	**NA**	**0.50**
	3/22/2001	ND	11.70		0.00	0.00	0.00
	6/27/2001	ND	11.24		0.00	0.00	0.00
	9/27/2001	**11.33**	**11.35**	**0.02**	**0.00**	**0.00**	**0.00**
	11/27/2001	**11.50**	**11.57**	**0.07**	**NA**	**NA**	**0.25**
	12/18/2001	**11.48**	**11.50**	**0.02**	**0.00**	**0.00**	**0.00**
	1/22/2002	**11.62**	**11.63**	**0.01**	**0.00**	**0.00**	**0.00**
	2/21/2002	ND	11.64		0.00	0.00	0.00
	3/20/2002	ND	11.10		0.00	0.00	0.00
	4/25/2002	ND	11.15		0.00	0.00	0.00
	5/29/2002	ND	11.11		0.00	0.00	0.00
	6/11/2002	ND	11.20		0.00	0.00	0.00
	7/31/2002	ND	11.41		0.00	0.00	0.00
	8/27/2002	ND	11.43		0.00	0.00	0.00
	9/25/2002	ND	11.65		0.00	0.00	0.00
	10/29/2002	ND	11.63		0.00	0.00	0.00
	11/25/2002	ND	11.95		0.00	0.00	0.00
	12/11/2002	ND	11.98		0.00	0.00	0.00
	2/17/2003	ND	12.40		0.00	0.00	0.00
	3/26/2003	ND	12.35		0.00	0.00	0.00
	4/29/2003	ND	11.99		0.00	0.00	0.00
	4/30/2003	ND	12.01		0.00	0.00	0.00
	5/16/2003	ND	11.59		0.00	0.00	0.00
	6/26/2003	ND	11.52		0.00	0.00	0.00
	7/14/2003	ND	11.39		0.00	0.00	0.00
	8/5/2003	ND	11.49		0.00	0.00	0.00
	8/26/2003	ND	11.61		0.00	0.00	0.00
	9/16/2003	ND	11.51		0.00	0.00	0.00
	10/13/2003	ND	11.85		0.00	0.00	0.00
	11/10/2003	ND	11.62		0.00	0.00	0.00
	12/8/2003	ND	11.57		0.00	0.00	0.00
	7/26/2006	ND	11.34		0.00	0.00	0.00

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product (feet)	Depth to Water (feet)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Groundwater Recovered (gallons)	Product/Water Mixture Recovered (gallons)
MW-11 Screened Interval (7' - 12')	**9/21/2000**	**10.38**	**11.38**	**1.00**	**0.00**	**0.00**	**0.00**
	11/1/2000	**10.46**	**11.60**	**1.14**	**NA**	**NA**	**50.00**
	12/20/2000	**10.49**	**11.49**	**1.00**	**0.00**	**0.00**	**0.00**
	1/24/2001	**10.57**	**11.61**	**1.04**	**0.00**	**0.00**	**0.00**
	2/27/2001	**10.02**	**10.10**	**0.08**	**0.00**	**0.00**	**0.00**
	3/22/2001	**10.19**	**10.41**	**0.22**	**0.00**	**0.00**	**0.00**
	4/24/2001	**10.12**	**10.20**	**0.08**	**NA**	**NA**	**20.00**
	5/30/2001	ND	9.67		0.00	0.00	0.00
	6/27/2001	ND	9.81		0.00	0.00	0.00
	7/26/2001	**10.06**	**10.35**	**0.29**	**0.00**	**0.00**	**0.00**
	8/30/2001	ND	10.11		0.00	0.00	0.00
	9/27/2001	**9.90**	**10.13**	**0.23**	**NA**	**NA**	**2.50**
	10/25/2001	**9.82**	**9.92**	**0.10**	**0.00**	**0.00**	**0.00**
	11/27/2001	**10.07**	**10.31**	**0.24**	**NA**	**NA**	**0.25**
	12/18/2001	**9.93**	**10.06**	**0.13**	**NA**	**NA**	**56.00**
	1/22/2002	**10.15**	**10.31**	**0.16**	**NA**	**NA**	**400.00**
	2/21/2002	**10.24**	**10.59**	**0.35**	**NA**	**NA**	**500.00**
	3/20/2002	ND	9.49		NA	NA	586.00
	5/29/2002	ND	9.55		0.00	0.00	0.00
	6/11/2002	ND	9.63		0.00	0.00	0.00
	7/31/2002	**9.89**	**9.92**	**0.03**	**0.00**	**0.00**	**0.00**
	8/27/2002	**9.93**	**9.97**	**0.04**	**NA**	**NA**	**215.00**
	9/25/2002	**10.15**	**10.26**	**0.11**	**NA**	**NA**	**391.00**
	10/29/2002	**10.19**	**10.36**	**0.17**	**NA**	**NA**	**73.00**
	11/25/2002	**10.27**	**11.15**	**0.88**	**NA**	**NA**	**66.00**
	12/11/2002	**10.31**	**11.16**	**0.85**	**NA**	**NA**	**302.00**
	1/16/2003	**10.65**	**11.59**	**0.94**	**NA**	**NA**	**208.00**
	2/17/2003	**10.64**	**11.50**	**0.86**	**NA**	**NA**	**369.00**
	2/18/2003	ND	10.81		NA	NA	538.00
	3/26/2003	**10.68**	**11.60**	**0.92**	**NA**	**NA**	**425.00**
	3/27/2003	**10.83**	**10.90**	**0.07**	**NA**	**NA**	**232.00**
	4/29/2003	**10.56**	**10.82**	**0.26**	**NA**	**NA**	**239.00**
	4/30/2003	ND	10.56		NA	NA	69.00
	5/16/2003	ND	10.14		NA	NA	161.00
	6/26/2003	**10.10**	**10.11**	**0.01**	**NA**	**NA**	**269.00**
	7/14/2003	ND	10.04		NA	NA	122.00
	8/5/2003	**10.15**	**10.20**	**0.05**	**0.00**	**0.00**	**0.00**
	8/26/2003	**10.15**	**10.21**	**0.06**	**NA**	**NA**	**78.00**
	9/16/2003	**10.35**	**10.38**	**0.03**	**NA**	**NA**	**55.00**
	10/13/2003	**10.43**	**10.52**	**0.09**	**Unknown**	**Unknown**	**Unknown**
	11/10/2003	**10.23**	**10.30**	**0.07**	**Unknown**	**Unknown**	**Unknown**
	12/8/2003	ND	10.23		Unknown	Unknown	Unknown
	1/13/2004	ND	10.23		0.00	0.00	0.00
	2/24/2004	ND	10.26		0.00	0.00	0.00
	3/10/2004	ND	9.72		0.00	0.00	0.00
	4/7/2004	ND	9.64		0.00	0.00	0.00
	5/12/2004	ND	9.50		0.00	0.00	0.00
	6/9/2004	ND	9.47		0.00	0.00	0.00
	7/9/2004	ND	9.68		0.00	0.00	0.00
	8/13/2004	ND	9.87		0.00	0.00	0.00
	9/10/2004	ND	10.04		0.00	0.00	0.00
	10/27/2004	**9.62**	**10.58**	**0.96**	**0.00**	**0.00**	**0.00**
	11/16/2004	**7.85**	**10.85**	**3.00**	**0.05**	**0.00**	**0.00**
	12/9/2004	**5.61**	**10.65**	**5.04**	**0.01**	**0.05**	**0.00**
	1/4/2005	ND	10.78		0.00	0.00	0.00
	2/28/2005	ND	10.20		0.00	0.00	0.00
	3/25/2005	ND	10.12		0.00	0.00	0.00
	4/25/2005	ND	9.88		0.00	0.00	0.00
	5/9/2005	ND	10.20		0.00	0.00	0.00
	6/3/2005	ND	10.36		0.00	0.00	0.00
	7/5/2005	ND	10.12		0.00	0.00	0.00
	8/2/2005	ND	9.94		0.00	0.00	0.00
	9/8/2005	ND	10.23		0.00	0.00	0.00
	10/26/2005	**10.56**	**11.00**	**0.44**	**0.04**	**0.00**	**0.00**
	11/28/2005	**10.32**	**10.63**	**0.31**	**0.02**	**0.00**	**0.00**
	12/7/2005	**10.48**	**10.64**	**0.16**	**0.02**	**0.00**	**0.00**
	7/26/2006	ND	9.99		0.00	0.00	0.00

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product (feet)	Depth to Water (feet)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Groundwater Recovered (gallons)	Product/Water Mixture Recovered (gallons)
MW-20 Screened Interval (8.5' – 13.5')	2/18/2003				NA	NA	539.00
	3/26/2003	**10.52**	**11.54**	**1.02**	**NA**	**NA**	**425.00**
	2/27/2003	**10.57**	**10.69**	**0.12**	**NA**	**NA**	**266.00**
	4/29/2003	**10.31**	**10.80**	**0.49**	**NA**	**NA**	**239.00**
	4/30/2003	**10.30**	**10.31**	**0.01**	**NA**	**NA**	**208.00**
	5/16/2003	ND	9.89		NA	NA	161.00
	6/26/2003	**9.85**	**9.91**	**0.06**	**NA**	**NA**	**269.00**
	7/14/2003	ND	9.81		NA	NA	122.00
	8/5/2003	**9.90**	**9.95**	**0.05**	**NA**	**NA**	**0.00**
	8/26/2003	**9.92**	**10.00**	**0.08**	**NA**	**NA**	**79.00**
	9/16/2003	**10.11**	**10.17**	**0.06**	**NA**	**NA**	**54.00**
	10/13/2003	**10.17**	**10.32**	**0.15**	**Unknown**	**Unknown**	**Unknown**
	11/10/2003	**9.98**	**10.05**	**0.07**	**Unknown**	**Unknown**	**Unknown**
	12/8/2003	ND	10.00		Unknown	Unknown	Unknown
	1/13/2004	ND	9.96		0.00	0.00	0.00
	2/24/2004	ND	10.01		0.00	0.00	0.00
	3/10/2004	ND	9.47		0.00	0.00	0.00
	4/7/2004	ND	9.38		0.00	0.00	0.00
	5/12/2004	ND	9.27		0.00	0.00	0.00
	6/9/2004	ND	9.24		0.00	0.00	0.00
	7/9/2004	ND	9.45		0.00	0.00	0.00
	8/13/2004	ND	9.64		0.00	0.00	0.00
	9/10/2004	ND	9.81		0.00	0.00	0.00
	10/27/2004	**9.62**	**10.58**	**0.96**	**0.03**	**0.00**	**0.00**
	11/16/2004	**8.51**	**10.55**	**2.04**	**0.04**	**0.02**	**0.00**
	12/9/2004	**5.70**	**10.38**	**4.68**	**0.03**	**0.06**	**0.00**
	1/4/2005	ND	10.08		0.00	0.00	0.00
	2/28/2005	ND	9.97		0.00	0.00	0.00
	3/25/2005	ND	9.86		0.00	0.00	0.00
	4/25/2005	ND	9.63		0.00	0.00	0.00
	5/9/2005	ND	9.95		0.00	0.00	0.00
	6/3/2005	ND	10.12		0.00	0.00	0.00
	7/5/2005	ND	9.86		0.00	0.00	0.00
	8/2/2005	ND	9.69		0.00	0.00	0.00
	9/8/2005	ND	9.96		0.00	0.00	0.00
	10/26/2005	**10.30**	**10.72**	**0.42**	**0.00**	**0.00**	**0.00**
	11/28/2005	**10.03**	**10.42**	**0.39**	**0.00**	**0.00**	**0.00**
	12/7/2005	**10.24**	**10.35**	**0.11**	**0.00**	**0.00**	**0.00**

Table 1
FREE PRODUCT RECOVERY SUMMARY
Total 4312
815 N. Mission St., Mt. Pleasant MI

Well	Date	Depth to Product (feet)	Depth to Water (feet)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Groundwater Recovered (gallons)	Product/Water Mixture Recovered (gallons)
MW-21 Screened Interval (8' - 13')	**3/27/2003**	**10.43**	**11.37**	**0.94**	**NA**	**NA**	**498.00**
	4/29/2003	**10.32**	**10.65**	**0.33**	**NA**	**NA**	**239.00**
	4/30/2003	**10.31**	**10.36**	**0.05**	**NA**	**NA**	**208.00**
	5/16/2003	--	9.91		NA	NA	160.00
	6/26/2003	**9.88**	**9.89**	**0.01**	**NA**	**NA**	**269.00**
	7/14/2003	--	9.80		NA	NA	121.00
	8/5/2003	**9.91**	**9.96**	**0.05**	**NA**	**NA**	**0.00**
	8/26/2003	**9.94**	**10.01**	**0.07**	**NA**	**NA**	**79.00**
	9/16/2003	**10.12**	**10.17**	**0.05**	**NA**	**NA**	**54.00**
	10/13/2003	**10.12**	**10.62**	**0.50**	**Unknown**	**Unknown**	**Unknown**
	11/10/2003	**9.96**	**10.21**	**0.25**	**Unknown**	**Unknown**	**Unknown**
	12/8/2003	ND	10.00		Unknown	Unknown	Unknown
	1/13/2004	ND	9.99		0.00	0.00	0.00
	2/24/2004	ND	10.03		0.00	0.00	0.00
	3/10/2004	ND	9.48		0.00	0.00	0.00
	4/7/2004	ND	9.40		0.00	0.00	0.00
	5/12/2004	ND	9.27		**0.00**	0.00	0.00
	6/9/2004	ND	9.25		0.00	0.00	0.00
	7/9/2004	ND	9.47		0.00	0.00	0.00
	8/13/2004	ND	9.65		0.00	0.00	0.00
	9/10/2004	ND	9.79		0.00	0.00	0.00
	10/27/2004	**10.22**	**10.34**	**0.12**	**0.02**	**0.00**	**0.00**
	11/16/2004	**9.45**	**10.41**	**0.96**	**0.01**	**0.02**	**0.00**
	12/9/2004	**8.06**	**10.22**	**2.16**	**0.03**	**0.03**	**0.00**
	1/4/2005	ND	10.07		0.00	0.00	0.00
	2/28/2005	ND	9.96		0.00	0.00	0.00
	3/25/2005	ND	9.86		0.00	0.00	0.00
	4/25/2005	ND	9.64		0.00	0.00	0.00
	5/9/2005	ND	9.93		0.00	0.00	0.00
	6/3/2005	ND	10.11		0.00	0.00	0.00
	7/5/2005	ND	9.87		0.00	0.00	0.00
	8/2/2005	ND	9.70		0.00	0.00	0.00
	9/8/2005	ND	9.98		0.00	0.00	0.00
	10/26/2005	**10.27**	**10.85**	**0.58**	**0.00**	**0.00**	**0.00**
	11/28/2005	ND	10.06		0.00	0.00	0.00
	12/7/2005	**10.25**	**10.36**	**0.11**	**0.00**	**0.00**	**0.00**
	7/26/2006	ND	9.78		0.00	0.00	0.00
	Totals:				**1.37**	**0.68**	**31,934.50**

ND - Non-detect

NA - Not Applicable. The amount of free product and water withdrawn from the well cannot be separated because a vaccum truck was used.

Table 4
SOIL ANALYTICAL RESULTS - BTEX, TMBs, MTBE
FORMER TPI PETROLEUM INC. #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method					8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	8260b	8260b
Residential/Commercial I Drinking Water Protection RBSLs					100	16,000	1,500	5,600	800	2,100	1,800	35,000	57,000	20 (M); 1.0	100
Groundwater/Surface Water Interface RBSLs					4,000(X)	2,800	360	700	15,000 (X)	570	1,100	870	ID	20 (M); 1.0	7,200(X)
Residential/Commercial I Indoor Air Inhalation RBSLs					1,600	2.5E+05(C)	87,000	1.5E+05(C)	5.9E+05(C)	1.1E+05(C)	94,000 (C)	2.5E+05	ID	670	2,100
Residential/Commercial I Finite VSIC for 5 Meter Source Thickness					34,000	5.1E+06	1.0E+06	6.1E+07	3.9E+07	5.0E+08	3.8E+08	3.0E+05	ID	1700	11,000
Residential/Commercial I Direct Contact RBSLs					1.8E+05	2.5E+05(C)	1.4E+05(C)	1.5E+05(C)	1.5E+06	1.1E+05(C)	94,000(C)	1.6E+07	8.1E+06	9.20E+01	91,000
Soil Saturation (Csat)					4.0E+05	2.5E+05	1.4E+05	1.5E+05	5.9E+06	1.1E+05	94,000	NA	NA	8.90E+05	1.2E+06
SAMPLE LOCATION	SAMPLE DEPTH	PID Reading (ppm)	SAMPLING DATE	ANALYSIS DATE	Benzene (I)	Toluene (I)	Ethylbenzene (I)	Xylenes (I)	MTBE	1,2,4 TMB (I)	1,3,5 TMB (I)	2-METHLYNAPTHALENE	NAPHTHALENE	1,2-DIBROMOETHANE	1,2-DICHLORO-ETHANE
					(micrograms per kilogram)										
SS-1	4'	unknown	2/24/1999	2/26/1999	<50	<50	<50	<100	<250	<100	<100	<250	<250	<50	<50
SS-2	3'	unknown	2/24/1999	2/26/1999	<50	<50	368	720	<250	1,410	893	<250	276	<50	<50
SS-3	3'	unknown	2/24/1999	3/1/1999	157	1,500	345	5,950	<250	3,040	3,040	425	400	<50	<50
SS-4	3'	unknown	2/24/1999	2/26/1999	<50	<50	<50	<100	<250	<100	<100	<250	<250	<50	<50
SS-5	3'	unknown	2/24/1999	3/1/1999	<50	<50	1,280	1,736	<250	19,200	10,800	13,400	9,240	<50	<50
SS-6	3'	unknown	2/24/1999	2/27/1999	2,550	45,300	405,000	755,000	<250	365,000	18,000	54,200	44,800	<50	<50
SS-7	3'	unknown	2/24/1999	3/1/1999	<50	<50	<50	579	<250	326	134	3,680	935	<50	<50
SS-8	3'	unknown	2/24/1999	2/27/1999	71	78	57	189	<250	1,010	784	8,570	1,190	<50	<50
SS-9	3'	unknown	2/24/1999	2/27/1999	<50	<50	<50	<100	<250	<100	<100	<250	<250	<50	<50
SB-1	9.5'	6	4/19/1999	4/23/1999	90	<50	87	310	<250	383	119	776	<250	NA	NA
SB-2	9.5'	17	4/19/1999	4/22/1999	<50	<50	<50	<100	<250	<100	<100	<250	<250	NA	NA
SB-3	9.5'	50	4/19/1999	4/22/1999	1,620	1,200	3,470	12,830	<250	10,900	2,630	4,210	4,170	NA	NA
SB-4	9.5'	50	4/19/1999	4/23/1999	6,600	4,150	15,400	60,920	<250	41,400	10,400	26,400	14,000	NA	NA
MW-2	9.5'	5	4/19/1999	4/22/1999	206	200	418	1,894	<250	1,720	430	1,700	808	NA	NA
SB-A	4'	0	7/11/2006	7/19/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
SB-E	5'	0	7/11/2006	7/19/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
MW-22	8'	751	7/11/2006	7/20/2006	<50	<50	330	990	<250	1,200	320	800	<250	<50	<50
MW-23	6'	1,632	7/11/2006	7/21/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
MW-23	11.5'	585	7/11/2006	7/20/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
MW-24	5'	0	7/11/2006	7/20/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
MW-25	5.5'	49	7/11/2006	7/20/2006	<50	<50	<50	<150	<250	450	290	3900	330	<50	<50
MW-25	12'	0	7/11/2006	7/19/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
MW-26	11.5'	0	7/11/2006	7/20/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
MW-27	11.5'	585	7/11/2006	7/19/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50
MW-28	11.5'	600	7/11/2006	7/19/2006	320	450	3,400	13,860	<250	6,200	1,500	1,100	1,600	<50	<50
MW-X (Duplicate) from SB-E	5'	0	7/11/2006	7/20/2006	<50	<50	<50	<150	<250	<50	<50	<250	<250	<50	<50

Orange background indicates that the indicator compound exists in concentrations above Drinking Water Criteria.

Red background indicates that the indicator compound exists above Soil Saturation concentrations.

"<" denotes result less than method detection limit indicated

NA - Not analyzed

ND - Not detected

C - Value presented is screening level based on chemical-specific generic soil saturation concentration.

I - Hazardous substance may exhibit the characteristic of ignitability as defined 40 C.F.R. 261.21.

X - Groundwater surface water interface (GSI) criterion shown in generic cleanup criteria tables is not protective for surface water used as a drinking water source.

Note: Field screening data is not available for SS-1 through SS-9

Table 2B
SOIL ANALYTICAL RESULTS - METALS
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method				MDEQ 213	MDEQ 213	MDEQ 213
Method Detection Limit (uness otherwise noted)				1	1	1
Statewide Default Background Levels				21	NA	NA
Residential/Commercial I Drinking Water Protection RBSLs				700	NA	NA
Groundwater/Surface Water Interface RBSLs				(G,X)	NA	NA
Residential/Commercial I Indoor Air Inhalation RBSLs				NLV	NA	NA
Residential/Commercial I Finite VSIC for 5 Meter Source Thickness				NLV	NA	NA
Residential/Commercial I Direct Contact RBSLs				4.0E+05	4.0E+05	4.0E+05
Particulate Soil Inhalation Criteria & RBSLs				NA	1.0E+08	NA
Soil Saturation Levels (Csat)				NA	NA	NA
SAMPLING LOCATION	**SAMPLE DEPTH**	**DATE**	**ANALYSIS DATE**	**TOTAL LEAD**	**FINE LEAD**	**COARSE LEAD**
			(milligrams per kilogram)			
SS-1	4'	2/24/1999	2/26/1999	5.9		
SS-2	3'	2/24/1999	2/26/1999	5.5		
SS-3	3'	2/24/1999	3/1/1999	13.3		
SS-4	3'	2/24/1999	2/26/1999	3.9		
SS-5	3'	2/24/1999	3/1/1999	22.6		
SS-6	3'	2/24/1999	2/27/1999	6.9		
SS-7	3'	2/24/1999	3/1/1999	15.1		
SS-8	3'	2/24/1999	2/27/1999	4.9		
SS-9	3'	2/24/1999	2/27/1999	12.2		
SB-1	9.5'	4/19/1999	4/23/1999	NA		
SB-2	9.5'	4/19/1999	4/22/1999	NA		
SB-3	9.5'	4/19/1999	4/22/1999	NA		
SB-4	9.5'	4/19/1999	4/23/1999	NA		
MW-2	9.5'	4/19/1999	4/22/1999	NA		
SB-A	4'	7/11/2006	7/20/2006	10	19.6	8.65
SB-E	5'	7/11/2006	7/20/2006	4.74	4.75	4.74
MW-22	8'	7/11/2006	7/20/2006	6.98	10.5	6.34
MW-23	6'	7/11/2006	7/20/2006	4.76	7.88	3.86
	11.5'	7/11/2006	7/20/2006	4.03	6.22	3.55
MW-24	5'	7/11/2006	7/20/2006	3.42	9.14	2.21
MW-25	5.5'	7/11/2006	7/20/2006	5.1	8.53	3.79
	12'	7/11/2006	7/20/2006	4.1	6.15	3.48
MW-26	11.5'	7/11/2006	7/20/2006	1.41	2.36	1.06
MW-27	11.5'	7/11/2006	7/20/2006	3.4	5.41	2.76
MW-28	11.5'	7/11/2006	7/20/2006	3.57	5.75	3.05

"<" denotes result less than method detection limit indicated

G - GSI value is pH or water hardness dependant

M - RBSL is below and therefore defaults to method detection limit

NLV - Not Likely to Volatilize

NA - Not Applicable

X - RBSL is not protective for surface water used as a drinking water source

**-Cr(VI) unless otherwise noted*

TABLE 2C
SOIL ANALYTICAL RESULTS - MOISTURE, BULK DENSITY, AND FRACTION ORGANIC CONTENT

FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

SAMPLE LOCATION	DATE	DEPTH (ft)	MOISTURE CONTENT %	BULK DENSITY (LBS/FT^3)	BULK DENSITY (g/CM^3)	FRACTION ORGANIC CONTENT (%)	SOIL TYPE
SB-A	4'	7/11/2006	3.7	103	1.65	0.098	Medium Grained Sand
SB-B	4'	7/11/2006	5.5	101	1.62	0.13	Medium Grained Sand
SB-C	4'	7/11/2006	3.7	105	1.68	<.05	Medium Grained Sand
SB-D	4'	7/11/2006	7.3	102	1.63	0.3	Medium Grained Sand

TABLE 3
TIER 1 MAXIMUM CONCENTRATION COMPARISON FOR SOILS

FORMER TPI PETROLEUM INC. #4312
815 N. Mission St., Mt. Pleasant MI

Target Analyte	Maximum Detected Concentration (ug/Kg)	Sample ID	Date Sampled	Tier 1 Residential and Commercial I (ug/Kg)						Tier 1 Commercial III (ug/Kg)		
				Drinking Water Protection RBSLs	Soil Volatilization to Indoor Air Inhalation RBSLs	Soil Direct Contact RBSLs	Groundwater Surface-Water Interface RBSLs	Soil Saturation Concentration Screening Level	Exceeds Tier 1 RBSLs	Soil Volatilization to Indoor Air Inhalation RBSLs	Direct Contact RBSLs	Exceeds Tier 1 RBSLs
VOLATILE ORGANIC COMPOUNDS (VOCs) and Lead												
Benzene	6,600	SB-4	4/19/1999	100	1,600	180,000	4,000	400,000	Yes	8,400	400,000	No
Toluene	46,300	SS-6	2/24/1999	16,000	250,000	250,000	2,800	250,00	Yes	250,000	250,000	No
Ethylbenzene	405,000	SS-6	2/24/1999	1,500	87,000	140,000	360	140,000	Yes	140,000	140,000	No
Xylenes	755,000	SS-6	2/24/1999	5,600	150,000	150,000	700	150,000	Yes	150,000	150,000	No
Methyl-tert-butyl-ether	<250	All Samples	All Samples	800	5,900,000	1,500,000	15,000	5,900,000	Yes	5,900,000	5,900,000	No
1,2,4-Trimethylbenzene	365,000	SS-6	2/24/1999	2,100	110,000	110,000	570	110,000	Yes	110,000	110,000	No
1,3,5-Trimethylbenzene	118,000	SS-6	2/24/1999	1,800	94,000	94,000	1,100	94,000	Yes	94,000	94,000	No
Naphthalene	44,800	SS-6	2/24/1999	35,000	250,000	16,000,000	870	NA	Yes	470,000	72,000,000	No
2-Methylnaphthalene	54,200	SS-6	2/24/1999	57,000	ID	8,100,000	ID	NA	Yes	ID	37,000,000	No
Lead	226,000	SS-5	2/24/1999	700,000	NLV	400,000	*	NA	No	NLV	400,000	No

Orange background indicates that the soil concentrations are above the lowest relevant criteria

ID = Insufficient Data
NLV = Not Likely to Volatilize
NA = Not Applicable

TABLE 4
GROUNDWATER ELEVATION DATA
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

MONITORING WELL	MEASUREMENT DATE	TOC ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	CORRECTED WATER ELEVATION	SCREEN DEPTH
		(feet)	*(feet below TOC)*		*(feet)*		*(feet bgs)*
MW-1	10/26/2005	100.00	ND	10.45	0.00	89.55	10 to 15
	2/8/2006		ND	9.73	0.00	90.27	
	7/26/2006		ND	9.73	0.00	90.27	
MW-2	**6/20/2000**	99.42	**10.89**	**11.25**	**0.36**	**88.44**	7 to 12
	9/20/2000		**9.32**	**11.03**	**1.71**	**89.67**	
	9/21/2000		**9.32**	**11.03**	**1.71**	**89.67**	
	11/1/2000		**9.56**	**11.35**	**1.79**	**89.41**	
	12/20/2000		**9.51**	**10.30**	**0.79**	**89.71**	
	1/24/2001		**9.61**	**11.32**	**1.71**	**89.38**	
	2/27/2001		**9.06**	**9.23**	**0.17**	**90.32**	
	3/22/2001		**9.31**	**9.58**	**0.27**	**90.04**	
	4/24/2001		**9.22**	**9.3**	**0.08**	**90.18**	
	5/30/2001		ND	8.76	0.00	90.66	
	6/27/2001		**8.92**	**9.09**	**0.17**	**90.46**	
	7/26/2001		**9.1**	**9.37**	**0.27**	**90.25**	
	8/30/2001		**8.78**	**8.80**	**0.02**	**90.64**	
	9/27/2001		**9.00**	**9.11**	**0.11**	**90.39**	
	10/25/2001		ND	--	0.00	--	
	11/27/2001		**9.11**	**9.17**	**0.06**	**90.30**	
	12/18/2001		**9.03**	**9.11**	**0.08**	**90.37**	
	1/22/2002		**9.22**	**9.24**	**0.02**	**90.20**	
	2/21/2002		ND	9.23	0.00	90.19	
	3/20/2002		ND	8.61	0.00	90.81	
	4/25/2002		ND	8.62	0.00	90.80	
	5/29/2002		ND	8.61	0.00	90.81	
	6/11/2002		ND	8.72	0.00	90.70	
	7/31/2002		**8.99**	**9.04**	**0.05**	**90.42**	
	8/27/2002		**9.42**	**9.45**	**0.03**	**89.99**	
	9/25/2002		**9.31**	**9.42**	**0.11**	**90.08**	
	10/29/2002		**9.57**	**9.62**	**0.05**	**89.84**	
	11/25/2002		**9.40**	**10.28**	**0.88**	**89.80**	
	12/11/2002		**9.46**	**10.11**	**0.65**	**89.80**	
	1/16/2003		**9.70**	**11.24**	**1.54**	**89.34**	
	2/17/2003		**9.65**	**11.38**	**1.73**	**89.34**	
	2/18/2003		ND	9.98	0.00	89.44	
	3/26/2003		**9.94**	**10.47**	**0.53**	**89.35**	
	3/27/2003		**9.98**	**10.11**	**0.13**	**89.41**	
	4/29/2003		**9.60**	**10.50**	**0.90**	**89.60**	
	4/30/2003		**9.74**	**9.85**	**0.11**	**89.65**	
	5/16/2003		**9.26**	**9.34**	**0.08**	**90.14**	
	6/26/2003		**9.23**	**9.28**	**0.05**	**90.18**	
	7/14/2003		**9.14**	**9.17**	**0.03**	**90.27**	
	8/5/2003		**9.25**	**9.33**	**0.08**	**90.15**	
	8/26/2003		**9.28**	**9.51**	**0.23**	**90.08**	
	9/16/2003		**9.32**	**10.14**	**0.82**	**89.90**	
	10/26/2005		**FP**	--	--	--	
	2/8/2006		**9.21**	**9.23**	**0.02**	**90.21**	
	7/26/2006		**9.12**	**9.15**	**0.03**	**90.29**	

TABLE 4
GROUNDWATER ELEVATION DATA
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

MONITORING WELL	MEASUREMENT DATE	TOC ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	CORRECTED WATER ELEVATION	SCREEN DEPTH
		(feet)	*(feet below TOC)*		*(feet)*		*(feet bgs)*
MW-3	**6/20/2000**	100.54	**10.47**	**11.03**	**0.56**	**89.93**	7.5 to 12.5
	9/20/2000		**10.16**	**10.96**	**0.80**	**90.18**	
	9/21/2000		**10.16**	**10.96**	**0.80**	**90.18**	
	11/1/2000		**10.80**	**12.05**	**1.25**	**89.43**	
	12/20/2000		**10.76**	**11.78**	**1.02**	**89.53**	
	1/24/2001		**10.83**	**12.02**	**1.19**	**89.41**	
	2/27/2001		**10.28**	**10.36**	**0.08**	**90.24**	
	3/22/2001		**10.44**	**10.48**	**0.04**	**90.09**	
	4/24/2001		**10.34**	**10.38**	**0.04**	**90.19**	
	5/30/2001		**9.87**	**9.89**	**0.02**	**90.67**	
	6/27/2001		ND	9.98	0.00	90.56	
	7/26/2001		**10.25**	**10.26**	**0.01**	**90.29**	
	8/30/2001		ND	10.2	0.00	90.34	
	9/27/2001		ND	10.16	0.00	90.38	
	10/25/2001		ND	10.06	0.00	90.48	
	11/27/2001		ND	10.25	0.00	90.29	
	12/18/2001		ND	10.17	0.00	90.37	
	1/22/2002		ND	10.33	0.00	90.21	
	2/21/2002		ND	10.41	0.00	90.13	
	3/20/2002		ND	9.71	0.00	90.83	
	4/25/2002		ND	9.75	0.00	90.79	
	5/29/2002		ND	9.73	0.00	90.81	
	6/11/2002		ND	9.84	0.00	90.70	
	7/31/2002		ND	10.11	0.00	90.43	
	8/27/2002		ND	10.18	0.00	90.36	
	9/25/2002		ND	10.47	0.00	90.07	
	10/29/2002		ND	10.43	0.00	90.11	
	11/25/2002		ND	10.65	0.00	89.89	
	12/11/2002		ND	10.14	0.00	90.40	
	1/16/2003		ND	11.14	0.00	89.40	
	2/17/2003		**11.10**	**11.11**	**0.01**	**89.44**	
	2/18/2003		**11.08**	**11.09**	**0.01**	**89.46**	
	3/26/2003		**11.10**	**11.19**	**0.09**	**89.42**	
	3/27/2003		**11.17**	**11.26**	**0.09**	**89.35**	
	4/29/2003		**10.78**	**10.85**	**0.07**	**89.74**	
	4/30/2003		**10.79**	**10.81**	**0.02**	**89.75**	
	5/16/2003		ND	10.37	0.00	90.17	
	6/26/2003		**10.32**	**10.32**	**0.00**	**90.22**	
	7/14/2003		ND	10.27	0.00	90.27	
	8/5/2003		ND	10.29	0.00	90.25	
	8/26/2003		ND	10.47	0.00	90.07	
	9/16/2003		**10.56**	**10.57**	**0.01**	**89.98**	
	10/26/2005		ND	10.90	0.00	89.64	
	2/8/2006		ND	10.22	0.00	90.32	
	7/26/2006		ND	10.21	0.00	90.33	

TABLE 4

GROUNDWATER ELEVATION DATA

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

MONITORING WELL	MEASUREMENT DATE	TOC ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	CORRECTED WATER ELEVATION	SCREEN DEPTH
		(feet)	*(feet below TOC)*			*(feet)*	*(feet bgs)*
MW-4	10/26/2005	100.35	ND	9.35	0.00	91.00	5 to 10
	2/8/2006		ND	7.74	0.00	92.61	
	7/26/2006		ND	8.06	0.00	92.29	
MW-5	10/26/2005	100.09	ND	10.68	0.00	89.41	8 to 13
	2/8/2006		ND	9.95	0.00	90.14	
	7/26/2006		ND	9.95	0.00	90.14	
MW-6	10/26/2005	99.88	ND	10.34	0.00	89.54	9 to 14
	7/26/2006		ND	9.68	0.00	90.20	
MW-7	10/26/2005	99.67	ND	10.10	0.00	89.57	9 to 14
	2/8/2006		ND	9.55	0.00	90.12	
	7/26/2006		ND	9.37	0.00	90.30	
MW-8	10/26/2005	99.97	ND	10.36	0.00	89.61	9 to 14
	7/26/2006		ND	9.71	0.00	90.26	
MW-9	10/26/2005	100.54	ND	11.06	0.00	89.48	7 to 12
	7/26/2006		ND	10.47	0.00	90.07	
MW-10	3/20/2000	101.56	ND	11.72	0.00	89.84	9 to 14
	6/20/2000		ND	11.58	0.00	89.98	
	9/20/2000		**11.92**	**11.94**	**0.02**	**89.64**	
	3/22/2001		ND	11.70	0.00	89.86	
	6/27/2001		ND	11.24	0.00	90.32	
	9/27/2001		**11.33**	**11.35**	**0.02**	**90.23**	
	11/27/2001		**11.50**	**11.57**	**0.07**	**90.04**	
	12/18/2001		**11.48**	**11.50**	**0.02**	**90.08**	
	1/22/2002		**11.62**	**11.63**	**0.01**	**89.94**	
	2/21/2002		ND	11.64	0.00	89.92	
	3/20/2002		ND	11.10	0.00	90.46	
	4/25/2002		ND	11.15	0.00	90.41	
	5/29/2002		ND	11.11	0.00	90.45	
	6/11/2002		ND	11.20	0.00	90.36	
	7/31/2002		ND	11.41	0.00	90.15	
	8/27/2002		ND	11.43	0.00	90.13	
	9/25/2002		ND	11.65	0.00	89.91	
	10/29/2002		ND	11.63	0.00	89.93	
	11/25/2002		ND	11.95	0.00	89.61	
	12/11/2002		ND	11.98	0.00	89.58	
	2/17/2003		ND	12.40	0.00	89.16	
	3/26/2003		ND	12.35	0.00	89.21	
	4/29/2003		ND	11.99	0.00	89.57	
	4/30/2003		ND	12.01	0.00	89.55	
	5/16/2003		ND	11.59	0.00	89.97	
	6/26/2003		ND	11.52	0.00	90.04	
	7/14/2003		ND	11.39	0.00	90.17	
	8/5/2003		ND	11.49	0.00	90.07	
	8/26/2003		ND	11.61	0.00	89.95	
	9/16/2003		ND	11.51	0.00	90.05	
	10/26/2005		ND	11.90	0.00	89.66	
	7/26/2006		ND	11.34	0.00	90.22	

TABLE 4
GROUNDWATER ELEVATION DATA
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

MONITORING WELL	MEASUREMENT DATE	TOC ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	CORRECTED WATER ELEVATION	SCREEN DEPTH
		(feet)	*(feet below TOC)*		*(feet)*		*(feet bgs)*
MW-11	**9/21/2000**	100.28	**10.38**	**11.38**	**1.00**	**89.65**	7 to 12
	11/1/2000		**10.46**	**11.60**	**1.14**	**89.54**	
	12/20/2000		**10.49**	**11.49**	**1.00**	**89.54**	
	1/24/2001		**10.57**	**11.61**	**1.04**	**89.45**	
	2/27/2001		**10.02**	**10.10**	**0.08**	**90.24**	
	3/22/2001		**10.19**	**10.41**	**0.22**	**90.04**	
	4/24/2001		**10.12**	**10.20**	**0.08**	**90.14**	
	5/30/2001		ND	9.67	0.00	90.61	
	6/27/2001		ND	9.81	0.00	90.47	
	7/26/2001		**10.06**	**10.35**	**0.29**	**90.15**	
	8/30/2001		ND	10.11	0.00	90.17	
	9/27/2001		**9.90**	**10.13**	**0.23**	**90.32**	
	10/25/2001		**9.82**	**9.92**	**0.10**	**90.44**	
	11/27/2001		**10.07**	**10.31**	**0.24**	**90.15**	
	12/18/2001		**9.93**	**10.06**	**0.13**	**90.32**	
	1/22/2002		**10.15**	**10.31**	**0.16**	**90.09**	
	2/21/2002		**10.24**	**10.59**	**0.35**	**89.95**	
	3/20/2002		ND	9.49	0.00	90.79	
	5/29/2002		ND	9.55	0.00	90.73	
	6/11/2002		ND	9.63	0.00	90.65	
	7/31/2002		**9.89**	**9.92**	**0.03**	**90.38**	
	8/27/2002		**9.93**	**9.97**	**0.04**	**90.34**	
	9/25/2002		**10.15**	**10.26**	**0.11**	**90.10**	
	10/29/2002		**10.19**	**10.36**	**0.17**	**90.05**	
	11/25/2002		**10.27**	**11.15**	**0.88**	**89.79**	
	12/11/2002		**10.31**	**11.16**	**0.85**	**89.76**	
	1/16/2003		**10.65**	**11.59**	**0.94**	**89.40**	
	2/17/2003		**10.64**	**11.50**	**0.86**	**89.43**	
	2/18/2003		ND	10.81	0.00	89.47	
	3/26/2003		**10.68**	**11.60**	**0.92**	**89.37**	
	3/27/2003		**10.83**	**10.90**	**0.07**	**89.43**	
	4/29/2003		**10.56**	**10.82**	**0.26**	**89.66**	
	4/30/2003		ND	10.56	0.00	89.72	
	5/16/2003		ND	10.14	0.00	90.14	
	6/26/2003		**10.10**	**10.11**	**0.01**	**90.18**	
	7/14/2003		ND	10.04	0.00	90.24	
	8/5/2003		**10.15**	**10.20**	**0.05**	**90.12**	
	8/26/2003		**10.15**	**10.21**	**0.06**	**90.12**	
	9/16/2003		**10.35**	**10.38**	**0.03**	**89.92**	
	10/26/2005		**FP**	--	--	--	
	2/8/2006		ND	9.99	0.00	90.29	
	7/26/2006		ND	9.99	0.00	90.29	

TABLE 4
GROUNDWATER ELEVATION DATA
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

MONITORING WELL	MEASUREMENT DATE	TOC ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS	CORRECTED WATER ELEVATION	SCREEN DEPTH
		(feet)	*(feet below TOC)*			*(feet)*	*(feet bgs)*
MW-12	10/26/2005	DESTROYED					
MW-13	10/26/2005	99.97	ND	10.31	0.00	89.66	6.5 to 11.5
	2/8/2006		UNDER PARKED TRUCK				
	7/26/2006		ND	9.63	0.00	90.34	
MW-14	10/26/2005	100.35	ND	11.00	0.00	89.35	7 to 12
	7/26/2006		ND	10.47	0.00	89.88	
MW-15	10/26/2005	101.45	ND	6.46	0.00	94.99	4 to 9
MW-16	10/26/2005	99.41	ND	9.42	0.00	89.99	9 to 14
	7/26/2006		ND	8.43	0.00	90.98	
MW-17	10/26/2005	100.73	ND	11.28	0.00	89.45	8 to 13
	2/8/2006		ND	10.59	0.00	90.14	
	7/26/2006		ND	10.58	0.00	90.15	
MW-18	10/26/2005	100.56	ND	10.96	0.00	89.60	9 to 14
MW-19	10/26/2005	--	ND	5.60	0.00	NO TOC	6 to 11
	7/26/2006		ND	8.35	0.00	NO TOC	
MW-20	2/18/2003	--	--	--	--		8 to 13
	3/26/2003	100.04	**10.52**	**11.54**	**1.02**	**89.27**	
	3/27/2003		**10.57**	**10.69**	**0.12**	**89.44**	
	4/29/2003		**10.31**	**10.80**	**0.49**	**89.61**	
	4/30/2003		**10.30**	**10.31**	**0.01**	**89.74**	
	5/16/2003		ND	9.89	0.00	90.15	
	6/26/2003		**9.85**	**9.91**	**0.06**	**90.18**	
	7/14/2003		ND	9.81	0.00	90.23	
	8/5/2003		**9.90**	**9.95**	**0.05**	**90.13**	
	8/26/2003		**9.92**	**10.00**	**0.08**	**90.10**	
	9/16/2003		**10.11**	**10.17**	**0.06**	**89.92**	
	10/26/2005		**FP**	--	--	--	
	2/8/2006		UNDER SNOW BANK				
MW-21	**3/27/2003**	100.04	**10.43**	**11.37**	**0.94**	**89.38**	8.5 to 13.5
	4/29/2003		**10.32**	**10.65**	**0.33**	**89.64**	
	4/30/2003		**10.31**	**10.36**	**0.05**	**89.72**	
	5/16/2003		ND	9.91	0.00	90.13	
	6/26/2003		**9.88**	**9.89**	**0.01**	**90.16**	
	7/14/2003		ND	9.80	0.00	90.24	
	8/5/2003		**9.91**	**9.96**	**0.05**	**90.12**	
	8/26/2003		**9.94**	**10.01**	**0.07**	**90.08**	
	9/16/2003		**10.12**	**10.17**	**0.05**	**89.91**	
	10/26/2005		**FP**	--	--	--	
	2/8/2006		UNDER SNOW BANK				
	7/26/2006		ND	9.78	0.00	90.26	
MW- 22	7/26/2006	100.31	ND	9.92	0.00	90.39	7 to 12
MW-23	7/26/2006	100.95	ND	3.31	0.00	97.64	2 to 7
MW- 24	7/26/2006	101.08	ND	3.4	0.00	97.68	2 to 7
MW- 25	7/26/2006	101.96	ND	11.6	0.00	90.36	10 to 15
MW- 26	7/26/2006	101.05	ND	11.04	0.00	90.01	20 to 25
MW- 27	7/26/2006	100.25	ND	10	0.00	90.25	20 to 25
MW- 28	7/26/2006	100.23			0.00	100.23	12 to 17

Bold text indicates that Free product was observed
ND - Non-detect
TOC - Top of well casing

TABLE
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	(G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-1 Screened Interval (10'-15')	3/20/2000		**7,800**	62	**560**	**354**	**52**	38	9	40	280	
	6/20/2000		**3,800**	81	**670**	**430**	**82**	50	13	89	330	
	9/20/2000		**1,300**	16	**190**	95	**170**	7	4	89	170	
	12/20/2000		**870**	<10	**96**	47	**200**	<10	<10	<50	90	
	3/22/2001		**6,200**	17	**81**	56	**140**	15	4	11	80	
	6/27/2001		**3,200**	25	**150**	120	**100**	41	10	<50	110	
	9/27/2001		**6,400**	46	**250**	214	**130**	17	5	23	140	<3
	12/18/2001		**4,100**	40	**320**	**311**	**45**	57	25	110	190	
	3/20/2002		**2,200**	23	**300**	209	38	46	16	22	120	
	6/11/2002		**3,800**	37	**240**	190	**41**	38	18	31	180	
	9/25/2002		**4,700**	21	**210**	**304**	**49**	22	23	15	62	
	12/11/2002		**5,000**	41	**340**	202	**65**	16	8	47	220	
	3/26/2003		**6,600**	25	**80**	69	39	**68**	7	<5	48	
	6/26/2003		**4,100**	24	**150**	160	**42**	17	16	13	63	
	9/16/2003		**2,800**	18	**190**	137	**66**	24	11	44	210	
	2/24/2004		**2,300**	13	**160**	106	12	27	17	130	130	
	5/12/2004		**3,900**	32	**230**	246	9	**65**	24	33	91	
	10/11/2004		**1,500**	9	73	163	13	**95**	28	35	150	
	4/26/2005		**1,000**	16	**250**	142	27	**85**	23	11	93	
	10/27/2005		**2,200**	12	**85**	55	8	33	8	23	54	
	7/27/2006	8/4/2006	**110**	1	<1	<3	<4	<1	<1	<5	<5	
MW-2 Screened Interval (7' - 12')	6/11/2002		**440**	580	**780**	**3,900**	**<200**	**930**	**220**	**360**	410	
	2/24/2004		**1,400**	25	**220**	**1,350**	**<100**	**530**	**130**	**280**	170	
	5/12/2004		**1,900**	**850**	**460**	**4,100**	**<100**	**1,500**	**420**	**740**	350	
	10/11/2004		**400**	100	**100**	**1,390**	**<200**	**620**	**200**	<250	260	
	4/26/2005		**3,200**	**1,400**	**800**	**6,600**	<4	**1,200**	**310**	**270**	240	

TABLE 5
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	{G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-3 Screened Interval (8' - 13')	6/11/2002		**11,000**	**16,000**	**3,300**	**19,000**	**<400**	**3,300**	**840**	**660**	**1,000**	
	9/25/2002		**13,000**	**11,000**	**2,100**	**11,100**	**<200**	**2,400**	**780**	**360**	**630**	
	12/11/2002		**14,000**	**7,600**	**1,900**	**8,800**	**<200**	**1,900**	**500**	**270**	480	
	2/24/2004		**1,900**	**3,200**	**1,100**	**6,100**	**<200**	**1,700**	**460**	**290**	320	
	5/12/2004		**4,500**	**5,700**	**1,100**	**10,200**	**<100**	**3,600**	**1,100**	**1,300**	**630**	
	10/11/2004		**1,600**	**1,600**	**680**	**5,200**	**<200**	**1,800**	**540**	<250	340	
	4/26/2005		**7,100**	**3,500**	**1,300**	**8,400**	<4	**2,000**	**530**	**290**	340	
	10/27/2005		**5,400**	**3,300**	**1,100**	**7,300**	<4	**1,700**	**440**	**<500**	<500	
	7/28/2006	8/9/2006	**2,700**	**1,800**	**730**	**4,700**	<4	**760**	**170**	<100	150	
MW-4 Screened Interval (5' - 10')	3/20/2000		DESTROYED									
	6/20/2000		DESTROYED (RE-INSTALLED 8/29/2000)									
	9/20/2000		**74**	200	**460**	**2,440**	<5	**1,000**	**88**	55	210	
	12/20/2000		NO SAMPLE COLLECTED									
	3/22/2001		**16**	95	**230**	**1,540**	<5	**1,100**	**140**	130	230	
	6/27/2001		**<25**	190	**740**	**2,180**	**<120**	**980**	**250**	**280**	480	
	9/27/2001		**83**	100	**440**	**2,090**	**<50**	**630**	**89**	93	340	
	12/18/2001		**20**	120	**530**	**2,160**	<5	**840**	**190**	23	180	
	3/20/2002		COULD NOT ACCESS									
	6/11/2002		**10**	45	**530**	**1,630**	<20	**950**	**80**	56	440	
	9/25/2002		NO SAMPLE COLLECTED									
	12/11/2002		**39**	48	**360**	**960**	<4	**640**	36	58	170	
	9/16/2003		**14**	40	**96**	**444**	<4	**120**	70	100	130	
	5/12/2004		<1	2	56	219	<4	**140**	21	10	26	
	10/11/2004		**8**	4	**170**	**650**	<4	**410**	**130**	33	260	
	10/27/2005		**8**	6	**230**	**683**	<4	**420**	53	31	170	
	7/27/2006	8/6/2006	<1	<1	38	92	<4	**430**	42	15	48	

TABLE

GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**620**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	(G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-5 Screened Interval (8' -13')	8/5/1999		**920**	<5	<5	<15	<4	<5	<5	<25	<25	
	3/20/2000		**1,100**	4	8	8	18	<1	<1	27	18	
	6/20/2000		**8,700**	12	**75**	23	**59**	<1	2	79	<5	
	9/20/2000		**17,000**	50	**250**	115	**91**	7	2	200	23	
	3/22/2001		**23,000**	140	**100**	65	26	12	2	71	66	
	6/27/2001		**13,000**	150	**130**	91	10	8	7	19	10	
	9/27/2001		**17,000**	140	**130**	134	11	7	1	31	13	
	12/18/2001		**11,000**	160	**210**	**281**	<5	28	10	180	62	
	3/20/2002		**14,000**	84	**220**	217	<4	9	3	35	12	
	6/11/2002		**2,600**	47	**170**	157	5	14	3	51	14	
	9/25/2002		**10,000**	71	**490**	**515**	<4	22	5	72	18	
	12/11/2002		**12,000**	64	**520**	**615**	<4	9	2	68	10	
	3/26/2003		**15,000**	110	**710**	**648**	<4	12	3	24	11	
	6/26/2003		**9,700**	82	**470**	**526**	<4	6	5	29	9	
	9/16/2003		**7,500**	110	**760**	**925**	<4	17	4	65	19	
	2/24/2004		**880**	11	61	42	<4	1	<1	93	48	
	5/12/2004		**3,600**	37	**730**	275	<4	15	2	31	9	
	10/11/2004		**7,300**	38	**580**	**308**	<4	14	4	16	19	
	4/26/2005		**5,800**	62	**630**	**352**	<4	30	6	35	38	
	10/27/2005		**6,000**	51	**1,400**	**563**	<4	13	22	31	9	
	7/28/2006	8/7/2006	**1,800**	28	**740**	201	<4	14	33	43	21	

TABLE 5
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	{G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-6 Screened Interval (9' - 14')	8/5/1999		4	<1	12	20	<4	**260**	9	21	8	
	3/20/2000		**130**	2	11	27	**210**	**74**	12	18	25	
	6/20/2000		**180**	<5	6	11	**180**	36	17	<25	<25	
	9/20/2000		**11**	<1	7	14	**77**	13	1	<5	14	
	12/20/2000		**82**	<1	5	10	**640**	17	3	<5	12	
	3/22/2001		**90**	<1	7	8	**410**	14	1	<5	9	
	6/27/2001		2	3	3	12	**50**	6	1	<5	<5	
	9/27/2001		<1	<1	<1	<3	<5	<1	<1	<5	<5	<3
	12/18/2001		**28**	<1	2	<3	**170**	4	<1	9	<5	
	3/20/2002		**180**	<1	2	<3	**120**	6	<1	<5	<5	
	6/11/2002		**230**	13	12	50	**190**	28	<10	<50	<50	
	9/25/2002		**370**	4	5	8	**92**	7	<1	<5	<5	
	12/11/2002		**570**	5	6	9	**150**	9	8	<5	5	
	3/26/2003		**1,300**	<10	<10	<30	**110**	<10	<10	<50	<50	
	6/26/2003		**260**	2	6	9	28	10	3	<5	<5	
	9/16/2003		<1	<1	<1	<3	8	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<2	15	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	19	<1	<1	<5	<5	
	8/13/2004		5	<1	<1	<2	8	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	9	<1	<1	<5	<5	
	4/25/2005		**22**	<1	2	<2	23	4	3	<5	<5	
	10/27/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	7/27/2006	8/6/2006	**30**	<1	<1	<2	<4	<1	<1	<5	<5	

TABLF

GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	(G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-7 Screened Interval (9' - 14')	8/5/1999		**3,600**	18	**850**	**2,130**	<5	**620**	**160**	<50	120	
	3/20/2000		**2,600**	16	**870**	**1,910**	**130**	**780**	**210**	100	280	
	6/20/2000		**3,500**	22	**1,500**	**3,010**	**150**	**1,200**	**300**	140	340	
	9/20/2000		**2,700**	28	**820**	**1,521**	**54**	**280**	**140**	<50	94	
	12/20/2000		**1,000**	3	**230**	**351**	**48**	**140**	53	6	84	
	3/22/2001		**1,300**	2	**270**	260	**45**	**240**	51	26	100	
	6/27/2001		**3,900**	7	**270**	**570**	**62**	**400**	**120**	57	150	
	9/27/2001		**6,400**	10	**210**	**417**	**40**	**400**	**130**	70	170	<3
	12/18/2001		**3,500**	20	**840**	**2,790**	**52**	**1,000**	**310**	150	250	
	3/20/2002		**3,900**	16	**880**	**2,990**	**51**	**1,300**	**250**	89	240	
	6/11/2002		**770**	2	**200**	**564**	35	**940**	**160**	100	240	
	9/25/2002		**2,100**	20	**460**	**990**	12	**310**	**150**	93	200	
	12/11/2002		**1,100**	15	**530**	**1,380**	12	**380**	**130**	96	170	
	3/26/2003		**1,500**	8	**300**	**720**	<4	**210**	71	24	72	
	6/26/2003		**950**	2	**410**	**386**	<4	**130**	**100**	33	88	
	9/16/2003		**610**	<1	**200**	64	<4	**270**	13	46	160	
	2/24/2004		<1	<1	<1	<2	15	<1	<1	<5	<5	
	5/12/2004		**470**	2	**240**	**610**	6	**780**	**180**	22	190	
	8/13/2004		**340**	1	**310**	**435**	6	**560**	**130**	33	170	
	10/11/2004		**620**	3	**580**	**930**	10	**540**	**190**	62	310	
	4/26/2005		**480**	2	**340**	**307**	<4	**210**	15	26	100	
	10/27/2005		**580**	<1	**280**	33	<4	58	2	<50	<50	
	7/28/2006	8/4/2006	**190**	<1	**180**	54	<4	**110**	17	12	43	

TABLE 5
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	(G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-8 Screened Interval (9' - 14')	8/5/1999		<1	<1	<1	<3	<4	<1	<1	<5	<5	
	3/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	6/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	9/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	12/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	3/22/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	6/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	9/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	3/26/2003		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	6/26/2003		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	9/16/2003		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	4/25/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/26/2005		2	1	2	9	<4	3	<1	<5	<5	
MW-9 Screened Interval (7' - 12')	6/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	9/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	12/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	3/22/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	6/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	9/27/2001		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	4/25/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/26/2005		<1	<1	1	7	<4	2	<1	<5	<5	

TABL[illegible]

GROUNDWATER ANALYTICAL [illegible]SULTS: BTEX and MTBE

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	(G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-10 Screened Interval (9' - 14')	6/20/2000		**62**	70	**280**	**1,760**	**<50**	**740**	**220**	200	310	
	12/20/2000		**31**	33	**190**	**398**	<5	**410**	**110**	78	210	
	3/22/2001		**32**	26	**170**	**550**	<25	**240**	35	34	110	7
	6/27/2001		**34**	31	**170**	**1,080**	<25	**450**	**170**	52	140	**14**
	6/11/2002		**100**	100	**250**	**920**	**<200**	**320**	**76**	<250	<250	
	9/25/2002		**40**	52	**320**	**1,260**	<40	**610**	**150**	56	180	
	12/11/2002		**110**	25	**280**	**1,391**	**120**	**770**	**130**	130	310	
	3/26/2003		**73**	36	2	**953**	27	**390**	**80**	40	110	
	6/26/2003		**41**	20	**94**	**479**	<40	**260**	**99**	<50	94	
	9/16/2003		2	4	38	145	<4	**180**	36	76	75	
	2/24/2004		**26**	12	**130**	**470**	<40	**410**	**100**	79	170	
	5/12/2004		**82**	14	**98**	**360**	<40	**110**	51	<50	<50	
	10/11/2004		**10**	10	**140**	**720**	<40	**490**	**170**	<50	190	
	4/26/2005		**10**	15	**120**	**460**	<4	**280**	**90**	72	130	
	10/27/2005		4	7	**100**	263	<4	**390**	31	74	140	
	7/27/2006	8/5/2006	**10**	<10	**79**	**390**	<40	**270**	45	<50	130	
MW-11 Screened Interval (7' - 12')	6/11/2002		**11,000**	**1,200**	**3,600**	**14,600**	**<400**	**3,600**	**920**	**570**	**930**	
	2/24/2004		**6,600**	240	**980**	**4,840**	**<100**	**1,900**	**520**	**330**	340	
	5/12/2004		**6,200**	440	**1,200**	**7,200**	**<100**	**2,000**	**530**	**400**	440	
	10/11/2004		**1,100**	150	**710**	**5,500**	**<200**	**2,400**	**780**	**260**	320	
	4/26/2005		**6,400**	420	**2,000**	**9,300**	<4	**2,700**	**660**	**270**	490	
	7/28/2006	8/9/2006	**2,400**	220	**1,200**	**4,900**	<4	**1,300**	**310**	110	220	

TABLE 5
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	(G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-12 Screened Interval (8' - 13')	11/2/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	12/20/2000		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	3/22/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	6/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	9/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	12/18/2001		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	3/20/2002		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	9/25/2002		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	12/11/2002		**53**	7	6	9	<4	32	14	8	<5	
	3/26/2003		2	<1	3	2	<4	12	4	<5	<5	
	6/26/2003		<1	<1	1	9	<4	**81**	32	170	22	
	9/16/2003		**8**	27	51	**291**	<20	**240**	**77**	140	42	
MW-13 Screened Interval (6.5' - 11.5')	11/2/2000		**13**	14	29	164	<4	**240**	61	**430**	81	
	12/20/2000		**5**	<1	<1	<4	<5	<1	<1	<5	<5	
	3/22/2001		**70**	<1	<1	<4	<5	<1	<1	<5	<5	
	6/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	9/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	12/18/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	3/20/2002		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	9/25/2002		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	12/11/2002		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	9/16/2003		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	4/25/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/26/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	7/27/2006	8/6/2006	<1	<1	<1	<2	<4	<1	<1	<5	<5	

TABL[illegible]

GROUNDWATER ANALYTICA[illegible]ESULTS: BTEX and MTBE

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	{G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-14 Screened Interval (7' - 12')	11/2/2000		<1	<1	<1	<4	18	<1	<1	<5	<5	
	12/20/2000		<1	<1	<1	<4	7	<1	<1	<5	<5	
	3/22/2001		<1	<1	<1	<4	24	<1	<1	<5	<5	
	6/27/2001		<1	<1	<1	<4	<5	<1	<1	<5	<5	
	9/27/2001		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	12/18/2001		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	3/20/2002		<1	<1	<1	<3	<5	<1	<1	<5	<5	
	6/11/2002		2	2	2	7	<4	3	1	<5	<5	
	9/25/2002		<1	<1	<1	<3	<4	<1	<1	<5	<5	
	12/11/2002		3	<1	4	3	8	2	<1	5	<5	
	3/26/2003		<1	<1	<1	<3	<4	<1	<1	<5	<5	
	6/26/2003		<1	<1	<1	<3	<4	<1	<1	<5	<5	
	9/16/2003		<1	<1	<1	<3	7	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<2	11	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	4/25/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/26/2005		<1	<1	1	5	<4	2	<1	<5	<5	

TABLE 5
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	(G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-15 Screened Interval (4' to 9')	11/2/2000		**580**	26	**1,300**	**2,830**	**<50**	**1,800**	**370**	**340**	**1,000**	
	12/20/2000		**440**	21	**1,100**	**2,397**	**<50**	**760**	**170**	160	**590**	
	3/22/2001		**440**	20	**1,500**	**2,620**	<5	**1,300**	**220**	240	**770**	
	6/27/2001		**150**	8	**410**	**595**	<5	**390**	61	60	260	<3
	9/27/2001		**180**	8	**330**	**600**	<25	**420**	64	54	230	<3
	12/18/2001		**410**	22	**820**	**1,477**	**<50**	**700**	**110**	70	480	
	3/20/2002		**230**	15	**520**	**860**	<20	**480**	71	55	310	
	9/25/2002		**200**	14	**600**	**1,181**	<4	**650**	**160**	130	390	
	12/11/2002		**450**	16	**990**	**2,094**	<40	**1,600**	**280**	110	**830**	
	3/26/2003		**75**	10	**320**	**754**	<40	**490**	**82**	<50	260	
	6/26/2003		**140**	7	**430**	**599**	<4	**410**	**120**	44	220	
	9/16/2003		**280**	12	**680**	**912**	<4	**640**	**77**	110	500	
	2/24/2004		**250**	19	**1,000**	**1,793**	<4	**830**	**170**	46	**580**	
	5/12/2004		**130**	9	**550**	**674**	<4	**560**	48	54	340	
	10/11/2004		**210**	13	**590**	**872**	<4	**580**	**110**	130	460	
	4/26/2005		**280**	16	**680**	**824**	<4	**460**	**120**	120	340	
	10/27/2005		**220**	8	**410**	**502**	<4	**240**	31	76	200	
MW-16 Screened Interval (9' - 14')	11/7/2002		<1	<1	<1	<3	<4	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	4/25/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/26/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	

TABI[illegible]
GROUNDWATER ANALYTICAl [illegible]SULTS: BTEX and MTBE

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	{G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-17 Screened Interval (8' - 13')	11/7/2002		<1	<1	<1	<3	<4	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	4/25/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/26/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	7/27/2006	8/6/2006	<1	<1	<1	<2	<4	<1	<1	<5	<5	
MW-18 Screened Interval (9' - 14')	11/7/2002		**390**	9	59	100	<4	10	2	<5	<5	
	3/26/2003		**750**	13	**84**	112	7	10	1	<5	<5	
	9/16/2003		<1	<1	<1	<3	<4	<1	<1	<5	<5	
	2/24/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	4/25/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/26/2005		<1	<1	<1	<2	<4	<1	<1	<5	<5	

TABLE 5
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	-140	18	35	730(X)	17	45	ID	13	{G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-19 Screened Interval (9' -14')	2/24/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	5/12/2004		<1	<1	<1	<2	<4	<1	<1	<5	<5	
	10/11/2004		2	<1	3	3	<4	<1	<1	<5	<5	
	4/25/2005		3	<1	<1	<2	<4	11	<1	<5	<5	
	10/27/2005		4	<1	1	<2	<4	6	1	<5	<5	
	7/27/2006		<1	<1	<1	<2	<4	<1	<1	<5	<5	
MW-20 Screened Interval (8' - 13')	2/24/2004		**2,500**	470	**1,400**	**4,900**	**<200**	**2,200**	**500**	**350**	470	
	5/12/2004		**4,600**	**890**	**1,400**	**7,000**	**<200**	**2,100**	**540**	**450**	**530**	
	4/26/2005		**7,000**	**2,700**	**2,400**	**10,500**	<4	**2,500**	**1,200**	**610**	**760**	
MW-21 Screened Interval (8.5' - 13.5')	2/24/2004		**1,000**	320	**1,100**	**6,200**	**<200**	**2,800**	**840**	**630**	430	
	5/12/2004		**3,900**	**920**	**1,600**	**9,600**	**<200**	**2,100**	**580**	**490**	510	
	4/26/2005		**2,700**	200	**1,500**	**7,300**	<40	**1,900**	**540**	**280**	320	
	7/28/2006	8/9/2006	**700**	74	**580**	**2,390**	<4	**570**	**120**	53	130	
MW-22 Screened Interval (7' - 12')	7/27/2006	8/6/2006	<1	2	59	204	<4	**310**	30	24	48	
MW-23 Screened Interval (2' - 7')	7/27/2006	8/4/2006	<1	<1	<1	<2	<4	<1	<1	<5	<5	

TABLE
GROUNDWATER ANALYTICAL RESULTS: BTEX and MTBE
FORMER TPI PETROLEUM, INC #4312
815 N. Mission St., Mt. Pleasant MI

Analytical Method			8260b	8260b	8260b	8260b	8260b	8260b	8260b	8270c	8270c	6020
Method Detection Limit (unless otherwise noted)			1	1	1	3	5	1	1	5	5	1
Residential/Commercial I Drinking Water Protection RBSLs			**5(A)**	**790**	**74(E)**	**280**	**40(E)**	**63(E)**	**72(E)**	**260**	**520**	**4**
Groundwater/Surface Water Interface RBSLs			200(X)	140	18	35	730(X)	17	45	ID	13	{G,X)
Residential/Commercial I Indoor Air Inhalation RBSLs			5,600	5.3E+05	1.1E+05(S)	1.9E+05	4.7E+07(S)	56,000(S)	61,000(S)	ID	31,000(S)	NLV
Residential/Commercial I Direct Contact RBSLs			11,000	5.3E+05	1.7E+05	1.9E+05	6.1E+05	56,000(S)	61,000(S)	25,000	31,000(S)	ID
MONITORING WELL	**SAMPLING DATE**	**ANALYSIS DATE**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**TOTAL XYLENES**	**MTBE**	**1,2,4-TMB**	**1,3,5-TMB**	**2-METHYLNAPHTHALENE**	**NAPHTHALENE**	**LEAD**
			micrograms per liter									
MW-24 Screened Interval (2' - 7')	7/27/2006	8/5/2006	<1	<1	<1	<2	<4	<1	<1	<5	<5	
MW-25 Screened Interval (10' - 15')	7/27/2006	8/6/2006	<1	<1	<1	<2	<4	<1	<1	<5	<5	
MW-26 Screened Interval (20' - 25')	7/27/2006	8/6/2006	<1	<1	<1	<2	5	<1	<1	<5	<5	
MW-27 Screened Interval (20' - 25')	7/27/2006	8/7/2006	**18**	20	26	133	<4	60	16	11	10	
MW-28 Screened Interval (12' - 17')	7/27/2006	8/7/2006	**44**	700	**890**	**2,770**	<4	**1,300**	**180**	200	440	

Orange background indicates that the compound exists in concentrations above Drinking water protection or GSI criteria. Whichever is more restrictive.

ID - Insufficient data to develop criterion

(A) - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

(E) - Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact my be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in the following table.

(S) - Criterion defaults to the hazardous substance-specific water solubility limit.

(X) -The GSI Criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in chose proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the table in this footnote, except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the MV, and the calculated FCV. See formulas in footnote (G). Soil protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

TABLE 6
TIER 1 MAXIMUM REMAINING CONCENTRATION COMPARISON FOR GROUNDWATER

FORMER TPI PETROLEUM, INC #4312

815 N. Mission St., Mt. Pleasant MI

Target Analyte	Maximum Detected Concentration (ug/L)	Sample ID	Date Sampled	Tier 1 Residential and Commercial 1 (ug/L)						Tier 1 Commercial III (ug/L)		
				Drinking Water RBSLs	Groundwater Surface Water Interface RBSLs	Groundwater Volatilization to Indoor Air Inhalation RBSLs	Groundwater Direct Contact RBSLs	Water Solubility	Exceeds Tier 1 RBSLs	Groundwater Volatilization to Indoor Air Inhalation RBSLs	Groundwater Direct Contact RBSLs	Exceeds Tier 1 RBSLs
VOLATILE ORGANIC COMPOUNDS (VOCs)												
Benzene	**2,700**	MW-3	7/28/2006	**5.0 (A)**	200(X)	5,600	11,000	175,000	Yes	35,000	11,000	No
Toluene	**1,800**	MW-3	7/28/2006	**790 (E)**	140	530,000 (S)	530,000 (S)	526,000	No	530,000 (S)	530,000 (S)	No
Ethylbenzene	**1,200**	MW-11	7/28/2006	**74 (E)**	1.80E+01	110,000	170,000 (S)	169,000	Yes	170,000 (S)	170,00 (S)	No
Xylenes	**4,900**	MW-11	7/28/2006	**280 (E)**	35	190,000 (S)	190,000 (S)	186,000	Yes	190,000 (S)	190,000 (S)	No
Methyl-tert-butyl ether	<40	MW-10	7/27/2006	**40 (E)**	730(X)	47,000,000 (S)	610,000	46,800,000	No	47,000,000 (S)	650,000	No
1,2,4-Trimethylbenzene	**1,300**	MW-11 & MW-28	7-27 & 7-28	**63 (E)**	17	56,000 (S)	56,000 (S)	55,890	Yes	56,000 (S)	56,000 (S)	No
1,3,5-Trimethylbenzene	**310**	MW-11	7/28/2006	**72 (E)**	45	61,000 (S)	61,000 (S)	61,150	Yes	61,000	61,000 (S)	No
Naphthalene	440	MW-28	7/27/2006	**520**	13	31,000	31,000 (S)	31,000	Yes	31,000	31,000	No
2-Methylnaphthalene	200	MW-28	7/27/2006	**260**	ID	ID	25,000 (S)	24,600	No	ID	25,000 (S)	No

All units in ug/L

ID = Insufficient Data

Bold text denotes that the water sample was below the lowest relivent criteria (lowest relivent criteria are also bolded).

(A) - Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

(E) - Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact my be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in the following table.

(S) - Criterion defaults to the hazardous substance-specific water solubility limit.

(X) -The GSI Criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in chose proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the table in this footnote, except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the MV, and the calculated FCV. See formulas in footnote (G). Soil protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

Storage Tank Information Database

Storage Tank Facilities List

SID-DEQ

Facility and Tank Details

Facility Information:
Facility ID:00016792
Total #4312
815 N MISSION, MT PLEASANT, MI 48858
Phone# : (734) 941-5518

Owner Information:
Total Petro Inc
28001 Citrin Dr, Romulus, MI 48174
Phone# : (734) 946-5500

Tank ID	Tank Status	Capacity (in gallons)	Installation Date	Substance Stored	Tank Release Detection	Piping Release Detection	Piping Material	Piping Type	Construction Material	Impressed Device
1	Removed from Ground	12000	4/21/1976 12:00:00 AM	Gasoline	Manual Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No
2	Removed from Ground	6000	4/21/1976 12:00:00 AM	Gasoline	Automatic Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No
3	Removed from Ground	6000	4/21/1976 12:00:00 AM	Gasoline	Automatic Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No
4	Removed from Ground	6000	4/21/1976 12:00:00 AM	Gasoline	Manual Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No

Release Information

Leak ID	LUST Site Name	Discovery Date	Substance Released	Release Status	Closed Date	Evaluation	Land Use Restrictions
C-0163-99	Total #4312	02/23/1999	Gasoline	Open			

FAXED 4/23/99 @ 1042

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND STORAGE TANK DIVISION

FACILITY NUMBER (see invoice) DA

USTD USE ONLY	
UPGRADE/CANCEL DATE	INCIDENT NUMBER
ENTRY DATE	

RELEASE REPORT: ☐ SUSPECTED ☒ CONFIRMED

THIS INFORMATION IS REQUIRED UNDER 1994 PA 451, AS AMENDED (Act 451). FAILURE TO COMPLY WITH THE PROVISIONS OF THIS ACT MAY RESULT IN A MISDEMEANOR AND/OR CIVIL PENALTIES NOT TO EXCEED $5000 PER DAY, PER TANK.

INSTRUCTIONS: The owner, operator, or consultant must report suspected and confirmed release reports to the Underground Storage Tank Division (USTD) within 24 hours of discovery. Phone 1-800-MICHUST or FAX this form to 517-335-2245. All information on this form must be provided regardless of whether the release is reported by telephone or FAX. If you have any questions, please contact the USTD at 517-373-8168.

PERSON REPORTING RELEASE	COMPANY (IF NOT OWNER/OPERATOR)	AREA CODE & TELEPHONE NUMBER
Russ Schindler	Compliance Inc	(616) 922-7400

I. OWNERSHIP OF TANKS

☐ PLEASE CHECK IF NEW ADDRESS

NAME OF OWNER (CORPORATION/INDIVIDUAL, ETC.): TPI Petroleum, Inc.

STREET ADDRESS: 28001 Citrin Drive

CITY: Romulus STATE: MI ZIP CODE: 48174

AREA CODE & TELEPHONE NUMBER: (734) 946-5500

RELEASE DISCOVERED: 2/23/99

II. LOCATION OF TANKS

☐ PLEASE CHECK IF SAME AS SECTION I

FACILITY NAME OR COMPANY SITE IDENTIFIER: TPI Station # 4312

STREET ADDRESS (P O Box Not Acceptable): 815 N. Mission

CITY: Mt Pleasant STATE: MI ZIP CODE:

COUNTY: Isabella TOWNSHIP:

CONTACT PERSON FOR LOCATION: G. Gould AREA CODE & TELEPHONE NUMBER: (734) 946-5500

TIME RELEASE DISCOVERED: 10:30 am

SIZE OF TANK (Gallons)	SUBSTANCE RELEASED	CONSTRUCTION OF TANK	REASON FOR BELIEVING RELEASE OCCURRED (e.g. presence of product, failed tightness test, vapors, stains)
6000	Unleaded gasoline	steel	vapors in soil identified via PID screening

COMMENTS:

USTD USE ONLY

DATE/TIME REPORTED _____ _____ ☐ AM ☐ PM

☐ PHONE ☐ FAX ☐ VOICE MAIL

DISTRIBUTION ORIGINAL: USTD, FACILITY FILE
COPY: OWNER

USTD SIGNATURE

EQP 3826 (10/95)

NESA & ASSOCIATES, INC.

❑ Corporate	23840 Dequindre, Warren, MI 48091	(586) 427-5525 ● Fax (586) 427-5530
❑ West Michigan	7380 Broadmoor Avenue, Caledonia, MI 49316	(616) 656-9310 ● Fax (616) 656-9362
❑ Illinois	7701 South Grant Street, Burr Ridge, IL 60527	(630) 230-0929 ● Fax (630) 230-0973
❑ Indiana	6015 Highview Drive, Fort Wayne, IN 46818	(260) 497-9440 ● Fax (260) 497-9447

June 3, 2005

EWO #44
BY: CERTIFIED MAIL

Mr. Larry Englehart
Michigan Department of Environmental Quality
Remediation and Redevelopment Division
503 N. Euclid Avenue, Suite 1
Bay City, MI 48706-2965

RE: Free Product Recovery Status Report
Former TPI Petroleum, Inc. #4312
815 North Mission Street
Mt. Pleasant, Isabella County, Michigan
Facility ID#: 0-0016792

Dear Mr. Englehart:

Please find enclosed a Free Product Recovery Status Report for former TPI Petroleum, Inc. #4312 located at 815 North Mission Street, Mt. Pleasant, Isabella County, Michigan.

If you have any questions or need additional information, please call NESA at 616-656-9310.

Respectfully Submitted,

NESA & ASSOCIATES, INC.

Michael K. Cox
Michael K. Cox, B.S.
Project Geologist

Gary L. Mast
Gary L. Mast, B.S.
Office Manager

cc: C. Shay Wideman (TPI)
Abdul S. Abdul Ph.D., PHG (NESA)

DEQ

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – REMEDIATION & REDEVELOPMENT DIVISION
PO BOX 30426, LANSING, MI 48909-7926, Phone 517-373-9837, Fax 517-373-2637, E-mail DEQ-STD-TANKS@michigan.gov

LEAKING UNDERGROUND STORAGE TANK
SUPPLEMENTAL REPORT COVER SHEET

RUCTIONS: Complete this form with all applicable information. Attach this form to all supplemental Leaking Underground Storage Tank (LUST) ittals; this includes all reports other than the Initial Assessment, Final Assessment, and Closure Reports. The Certified Underground Storage Tank Professional (CP) MUST sign below. Please return this completed report cover sheet to the appropriate RRD District Office. See form EQP4410 for a complete list of RRD district offices. Use of this form to provide the listed information is voluntary.

IDENTIFY TYPE OF SUPPLEMENTAL REPORT: Quarterly Free Product Recovery Status Report

FACILITY NAME: **Former Total #4312** | FACILITY ID NUMBER: **0-0016792**

STREET ADDRESS: **815 North Mission Street** CITY: **Mt. Pleasant**

STATE: **Michigan** ZIP CODE: **48858** COUNTY: **Isabella**

DATE(S) RELEASE(S) DISCOVERED: **2/23/99** | CONFIRMED RELEASE NUMBER(S): **C-0163-99**

O/O NAME: **Valero, Inc.**

O/O STREET ADDRESS: **P.O. Box 696000, San Antonio** STATE: **TX** ZIP CODE: **78269-6000**

CONTACT PERSON: **C. Shay Wideman** | PHONE NUMBER: **(210) 592-4663**

ANSWER ALL QUESTIONS

1. Type(s) of product released: **Gasoline**

2. Free product present:
   a. Currently? ☒YES ☐NO — If YES, total gallons recovered since last report: **0.12**
   b. Previously? ☒YES ☐NO — If YES, total gallons recovered to date: **0.41 (by NESA)** **(Free product last recovered on 3/25/05)**

3. Have vapors been identified in any confined spaces (basement, sewers)? ☐YES ☒NO

4. Estimated depth to groundwater: **Approx. 9.82 feet btoc** | Estimated groundwater flow direction: **North-Northwest**

5. Estimated distance and direction from point of release to nearest:
   a. Private well: **1 Mile N** b. Municipal well: **1 Mile SW** c. Surface water/wetland: **0.75 Mile NW**

6. Since last report: a. cubic yards of soil remediated: **0** b. gallons of groundwater remediated: **0**

7. Totals to date: a. cubic yards of soil remediated: **100** b. gallons of groundwater remediated: **27,253 (product & water)**

8. Michigan RBCA Site Classification (1-4): **1**

9. Has contamination migrated off-site above Tier 1 Residential RBSLs ☒YES ☐NO
   If YES, have off-site impacted parties been notified (per Section 21309a(3) of Part 213 ☒YES ☐NO

10. MTBE | Has MTBE been detected in any groundwater sample? ☒YES ☐NO | Maximum MTBE concentration found in groundwater **640** ppb. **(MW-6 on 12/20/00)**

CERTIFICATION OF REPORT COMPLETION

I, the undersigned CP, hereby attest to the best of my knowledge and belief that the statements in this document and all attachments are true, accurate, and complete. I certify that the report was submitted to the Remediation & Redevelopment Division (RRD)

on 6/3/05 (Date submitted **REQUIRED**)

CP Original Signature - **(REQUIRED)** Date 6/3/05

Abdul S. Abdul, Ph.D., PHG
PRINT CP's Name

CP ID **634**

Gary L. Mast, B.S.
PRINT QC PROJECT MANAGER'S NAME

NESA & Associates, Inc.
NAME OF CONSULTING FIRM

QC ID: **Z0313**

ESS **23840 Dequindre, Warren, MI 48091**

PHONE: **(616) 656-9310** FAX: **(616) 656-9362**

PO BOX 30426, LANSING, MI 48909-7926, Phone 517-373-9837, Fax 517-373-2637, E-mail DEQ- -TANKS@michigan.gov

FREE PRODUCT RECOVERY STATUS REPORT

Authorized by Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

INSTRUCTIONS: Use the checklist below to ensure that all required information is provided in the Quarterly Free Product Recovery Status Report and submit **WITH THE SUPPLEMENTAL REPORT COVER SHEET (EQP3849)** to the appropriate Remediation & Redevelopment Division (RRD) district office. See form eqp4410 for a complete list of RRD district offices. Include this checklist as a table of contents. Each page of the report should be consecutively numbered. The location column should be completed with the appropriate page number for each item. Refer to Storage Tank Division Operational Memorandum No. 7 for further instructions. The reporting schedule may be altered at the discretion of the DEQ project manager based on site conditions.

FACILITY ID NUMBER: 0-00016792

SITE NAME: Former Total #431

COUNTY: Isabella

Section	Table of Contents	Page
1.0	ACTIVITIES COMPLETED Section 21307(2) and (3)(b),(c)	
	A. Describe response activities completed to address free product.	1
2.0	EXPOSURE PATHWAY EVALUATION Section 21307(2)(a),(e) and (3)(c)	
	A. Identify and describe complete exposure pathways related to the free product.	1 - 2
	B. Provide a scaled site map, which shows the extent of free product including the utility corridors, buildings with or without basements, private wells, and sensitive habitat/surface water.	Figures 1 & 2
3.0	DATA TREND ANALYSIS Section 21307(2)(c)(*i*),(*ii*) and (3)(c)	
	A. Provide a data summary table for all wells that contain free product. The table should include monitoring point location, date sampled, depth to water, free product thickness, and quantity of free product removed.	Table 1
	B. Provide graphs of static water elevations of a well near the free product plume versus free product apparent thickness compared over time. These graphs should be provided for all monitoring wells that have shown free product.	Graphs 1A - 1D
	C. Provide graphs of static water elevations versus groundwater concentration (e.g., Benzene, MTBE, and/or total BTEX) in select downgradient monitoring wells compared over time.	Graphs 2 & 3
4.0	FEASIBILITY ANALYSIS ON SELECTION OF RECOVERY SYSTEM Section 21307(2)(c)(*i*),(*ii*) and (3)(c), and 21308a(1)(b)(*xviii*)	
	A. Provide initial and any subsequent bail-down test recovery data, analysis of which will determine the frequency of recovery. Refer to the references in Storage Tank Division Operational Memorandum No. 7 for sample calculations.	Not Applicable
	B. Attach a schematic drawing of the free product recovery system.	Not Applicable
5.0	PERMITTING AND WASTE DISPOSAL TRACKING	
	A. Provide copies of manifests or trip logs of liquid industrial waste or recycling per Section 21307(2)(c)(*iii*) and (3)(c), and 21308a(1)(b)(*xvii*)(H).	Not Applicable
	B. Provide the air quality sampling results and calculations to meet Rule 290 of the Air Pollution Control Rules promulgated under Part 55, Air Pollution Control, of Act 451.	Not Applicable
6.0	OPERATION AND MAINTENANCE RECOVERY DATA Section 21307(2)(c)(*i*),(*ii*) and (3)(c)	
	A. Describe any free product system design modifications, since last submittal.	3
	B. Provide the action levels that may trigger a change in remediation strategy.	3
7.0	PROPOSED FUTURE ACTIONS Section 21307(2)(e) and Section 21309a(2)(e)	
	A. Provide a schedule for free product evaluation and groundwater sampling.	3 - 4
	B. Provide a schedule outlining the next operation and maintenance activities.	Not Applicable
	C. Provide the date of the next report.	4

1.0 FREE PRODUCT RESPONSE ACTIVITIES

NESA & Associates, Inc. (NESA) was retained by TPI Petroleum, Inc. to provide environmental services at former TPI #4312, located at 815 North Mission Street, Mt. Pleasant, in Isabella County, Michigan (Figure 1).

This report provides the results of free product monitoring activities for the period of January 1, 2005, through March 31, 2005. Information regarding the discovery of free product and previous free product response activities are documented in various environmental reports prepared by the previous environmental consultants.

Since January 2004, NESA personnel have been inspecting monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, MW-11, MW-13, MW-20 and MW-21 on a monthly basis for the presence of free product.

During the first quarter of year 2005, free product was observed in monitoring wells MW-2 and MW-20. A total of 0.12 gallons of free product was recovered during the first quarter of year 2005. The free product data are summarized in Table 1.

2.0 EXPOSURE PATHWAY EVALUATION

A scaled site map showing the locations of the utility corridors, monitoring wells and former buildings is provided as Figure 1. There are no potable wells on the former TPI Station #4312 property. The nearest private well is approximately 1-mile north of the subject property. The nearest surface water or sensitive habitat is located approximately 0.75-miles northwest of the subject property.

Potential exposure pathways for free product in the capillary fringe and groundwater zones include volatilization and inhalation of ambient and indoor air, groundwater transport and groundwater ingestion, groundwater direct contact and surface water impact.

Exposure due to Ambient Air Inhalation and Enclosed Space Inhalation

The free product observed during the last six months is limited to the immediate vicinity of monitoring wells MW-2, MW-11, MW-20 and MW-21 (Figure 2). The subject property is being used as an automotive repair business operated by Olsen's Tire Service. The existing structures on the subject property do not have basements. During past field activities, volatile organic compounds (VOCs) have not been detected with a portable gas detector above background levels in the ambient air or the storm sewer catch basins located in the vicinity of the subject property.

Based on these observations, ambient air inhalation or enclosed space inhalation exposures related to free product have not been identified at the subject property. Vapor screening of the ambient air and storm sewer catch basins will continue during field activities to further monitor the inhalation exposure pathways.

Exposure due to Groundwater Ingestion

The City of Mt. Pleasant provides potable water to the subject property and the surrounding commercial businesses. The nearest private well is approximately 1-mile north of the subject property. The nearest municipal well is approximately 1-mile southwest of the subject property. Based on groundwater analytical data from various monitoring wells installed at on-site and off-site locations, the zone of free product and petroleum impacted groundwater is limited to the subject property, the Pickard Avenue right-of-way, and the J.W. Filmore's Restaurant property. Based on these observations, exposure to free product by groundwater ingestion is not an immediate or short-term concern.

Exposure due to Dermal Contact with Groundwater

Based on field observations and utility maps provided by the City of Mt. Pleasant Department of Public Works, the depths of the storm and sanitary sewers in the vicinity of the subject property range from 4.5 to 11-feet below grade level (bgl). The average depth to groundwater, as measured during the November 2, 2004, groundwater sampling event, is 9.82-feet. Therefore, there is a potential for dermal contact with free product by utility workers. However, the subsurface storm and sanitary sewer utilities have not been identified within the estimated extent of free product, which is presented in Figure 2.

Exposure at the Groundwater/Surface Water Interface

The nearest surface water or sensitive habitat is located approximately 0.75-miles northwest of the subject property. The zones of free product identified within the last six months, which are limited to the immediate vicinity of monitoring wells MW-2, MW-11, MW-20 and MW-21, do not represent a potential groundwater/surface water interface (GSI) exposure. In addition, the subsurface storm sewers identified at the subject property and within the Mission St. and Pickard Street right-of-ways do not intersect the groundwater zone. Therefore, the potential for GSI impact via the utility corridors is also eliminated.

3.0 DATA TREND ANALYSIS

The results of the free product inspections are provided in Table 1. During the first quarter of 2005, large snow piles were present onsite from snowplowing activities. Therefore, select monitoring wells were not accessible. A Free Product Hydrograph that compares the free product thicknesses in monitoring well MW-2 to the depths to groundwater in monitoring well MW-1 is provided as Graph 1A. Free Product Hydrographs that compare the free product thicknesses in monitoring wells MW-11, MW-20 and MW-21 to the depths to groundwater in monitoring well MW-7 are provided in Graph 1B through Graph 1D, respectively. There are no consistent trends between the free product thicknesses observed in the above wells to the fluctuation in the water table elevation.

Graphs 2 and 3 represent the benzene concentrations, total BTEX concentrations and static groundwater elevations for monitoring wells MW-6 and MW-7, respectively.

These monitoring wells are located off-site and hydraulically down gradient of the zones of free product. Historic fluctuations in the groundwater elevation in monitoring wells MW-6 and MW-7 have correlated with the corresponding groundwater chemistry data.

4.0 FREE PRODUCT RECOVERY FEASIBILITY ANALYSIS

During the first quarter of 2005, free product bail-down tests were not preformed at the subject property. Free product bail-down tests that were previously completed are documented in various environmental reports prepared by the previous environmental consultants.

NESA personnel have not operated a free product recovery system such as a total fluid recovery pumps or free product skimmer pumps. Therefore, a schematic drawing of a free product recovery system is not provided in this report.

5.0 PERMITTING & WASTE DISPOSAL TRACKING

The free product and groundwater mix recovered from the site is presently stored in an MDOT approved, 55-gallon steel drum. During this reporting period, free product was not transported to a disposal or recycling facility. Documentation for past free product and groundwater disposal activities was provided in various free product reports prepared by Compliance, Inc.

A permit to install from the MDEQ-Air Quality Division was not required for the monthly free product inspections. Therefore, air quality sampling and calculations were not completed under the requirements of Rule 290 "Permit to Install Exemptions" of the Air Pollution Control Rules promulgated under Part 55, Air Pollution Control, of Act 451.

6.0 OPERATION & MAINTENANCE RECOVERY DATA

There were no modifications to the selected free product abatement method during the first quarter of 2005. The free product former recovery strategy will be re-evaluated if any of the following conditions occur during the next quarter.

- Free product is discovered in any monitoring wells or former recovery wells besides MW-2, MW-11, MW-20 and MW-21.
- An adverse vapor exposure pathway is identified during free product monitoring and free product recovery events.

7.0 PROPOSED ACTIVITIES

Free product inspections of monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, MW-11, MW-13, MW-20 and MW-21 will continue on a monthly basis.

A groundwater-sampling event will be completed in April 2005. A report summarizing the field activities and groundwater analytical data will be submitted to the MDEQ approximately 45-days after the sampling event.

The next Free Product Recovery Status Report will be submitted to the MDEQ in July 2005.

FIGURES

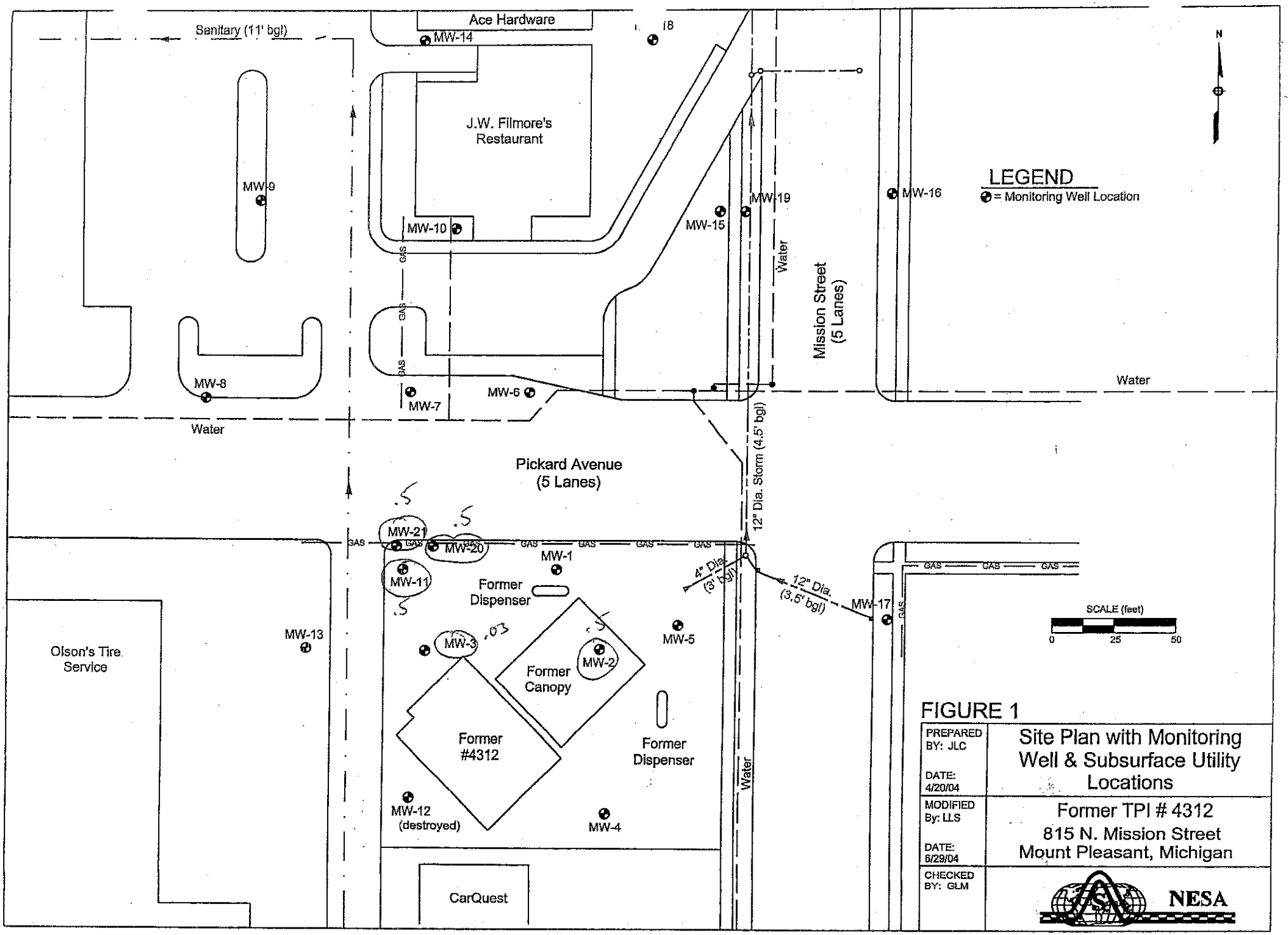


FIGURE 1

PREPARED BY: JLC DATE: 4/20/04	Site Plan with Monitoring Well & Subsurface Utility Locations
MODIFIED By: LLS DATE: 6/29/04	Former TPI # 4312 815 N. Mission Street Mount Pleasant, Michigan
CHECKED BY: GLM	NESA

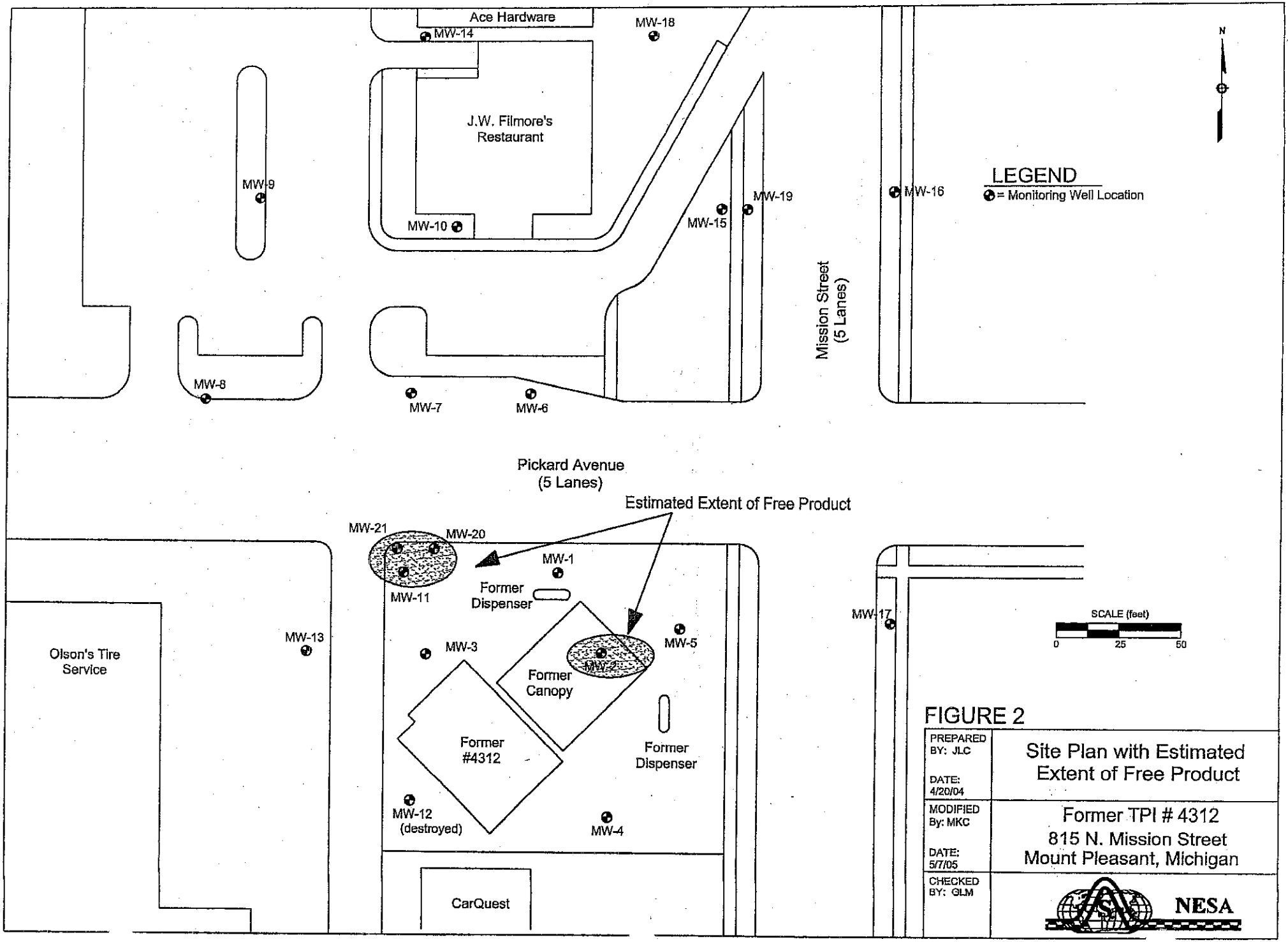


FIGURE 2

PREPARED BY: JLC DATE: 4/20/04	Site Plan with Estimated Extent of Free Product
MODIFIED By: MKC DATE: 5/7/05	Former TPI # 4312 815 N. Mission Street Mount Pleasant, Michigan
CHECKED BY: GLM	NESA

ATTACHMENT

TABLE 1

Free Product Recovery Data
Former TPI #4312
815 North Mission Street, Mt. Pleasant, Michigan

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-1	4/7/04	9.33	0	0	0.00
	5/12/04	9.32	0	0	0.00
	6/9/04	9.18	0	0	0.00
	7/9/04	9.37	0	0	0.00
	8/13/04	9.66	0	0	0.00
	9/10/04	9.86	0	0	0.00
	10/27/04	10.21	0	0	0.00
	11/16/04	10.24	0	0	0.00
	12/9/04	10.03	0	0	0.00
	1/4/05	10.06	0	0	0.00
	2/28/05	Inaccessible	--	--	0.00
	3/25/05	9.93	0	0	0.00
				Total gallons recovered by NESA & Associates	0.00

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-2	4/7/04	8.75	0	0	0.00
	5/12/04	8.71	0	0	0.00
	6/9/04	8.59	0	0	0.00
	7/9/04	8.82	0	0	0.00
	8/13/04	9.05	0	0	0.00
	9/10/04	9.17	0	0	0.00
	10/27/04	9.67	0	0	0.00
	11/16/04	9.79	0.24	0.01	0.01
	12/9/04	10.07	8.16	0.07	0.08
	1/4/05	9.95	5.64	0.05	0.13
	2/28/05	Inaccessible	--	0	0.13
	3/25/05	9.48	2.76	0.04	0.17
				Total gallons recovered by NESA & Associates	0.17

TABLE 1 - Continued

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-3	4/7/04	9.85	0	0	0.00
	5/12/04	9.71	0	0	0.00
	6/9/04	9.68	0	0	0.00
	7/9/04	9.90	0	0	0.00
	8/13/04	10.09	0	0	0.00
	9/10/04	10.26	0	0	0.00
	10/27/04	10.71	0	0	0.00
	11/16/04	10.69	0	0	0.00
	12/9/04	9.56	0	0	0.00
	1/4/05	11.34	0	0	0.00
	2/28/05	10.41	0	0	0.00
	3/25/05	10.32	0	0	0.00
				Total gallons recovered by NESA & Associates	0.00

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-4	4/7/04	8.05	0	0	0.00
	5/12/04	7.03	0	0	0.00
	6/9/04	8.20	0	0	0.00
	7/9/04	8.49	0	0	0.00
	8/13/04	9.29	0	0	0.00
	9/10/04	9.18	0	0	0.00
	10/27/04	Dry	0	0	0.00
	11/16/04	9.00	0	0	0.00
	12/9/04	--	0	0	0.00
	1/4/05	--	0	0	0.00
	2/28/05	--	0	0	0.00
	3/25/05	--	0	0	0.00
				Total gallons recovered by NESA & Associates	0.00

TABLE 1 - Continued

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-5	4/7/04	9.42	0	0	0.00
	5/12/04	9.44	0	0	0.00
	6/9/04	9.31	0	0	0.00
	7/9/04	9.49	0	0	0.00
	8/13/04	9.78	0	0	0.00
	9/10/04	9.97	0	0	0.00
	10/27/04	10.33	0	0	0.00
	11/16/04	10.41	0	0	0.00
	12/9/04	10.21	0	0	0.00
	1/4/05	10.25	0	0	0.00
	2/28/05	10.17	0	0	0.00
	3/25/05	10.11	0	0	0.00
				Total gallons recovered by NESA & Associates	0.00

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-7	4/7/04	9.15	0	0	0.00
	5/12/04	9.14	0	0	0.00
	6/9/04	9.04	0	0	0.00
	7/9/04	9.20	0	0	0.00
	8/13/04	9.45	0	0	0.00
	9/10/04	9.83	0	0	0.00
	10/27/04	10.18	0	0	0.00
	11/16/04	9.96	0	0	0.00
	12/9/04	9.71	0	0	0.00
	1/4/05	9.74	0	0	0.00
	2/28/05	Inaccessible	--	0	0.00
	3/25/05	9.70	0	0	0.00
				Total gallons recovered by NESA & Associates	0.00

TABLE 1 - Continued

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-11	4/7/04	9.64	0	0	0.00
	5/12/04	9.50	0	0	0.00
	6/9/04	9.47	0	0	0.00
	7/9/04	9.68	0	0	0.00
	8/13/04	9.87	0	0	0.00
	9/10/04	10.04	0	0	0.00
	10/27/04	10.58	0.96	0	0.00
	11/16/04	10.85	3	0.05	0.05
	12/9/04	10.65	5.04	0.01	0.06
	1/4/05	10.78	0	0	0.06
	2/28/05	10.20	0	0	0.06
	3/25/05	10.12	0	0	0.06
				Total gallons recovered by NESA & Associates	0.06

WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-13	4/7/04	9.26	0	0	0.00
	5/12/04	9.25	0	0	0.00
	6/9/04	9.11	0	0	0.00
	7/9/04	9.29	0	0	0.00
	8/13/04	9.59	0	0	0.00
	9/10/04	9.80	0	0	0.00
	10/27/04	10.15	0	0	0.00
	11/16/04	10.17	0	0	0.00
	12/9/04	9.94	0	0	0.00
	1/4/05	9.95	0	0	0.00
	2/28/05	9.89	0	0	0.00
	3/25/05	9.86	0	0	0.00
				Total gallons recovered by NESA & Associates	0.00

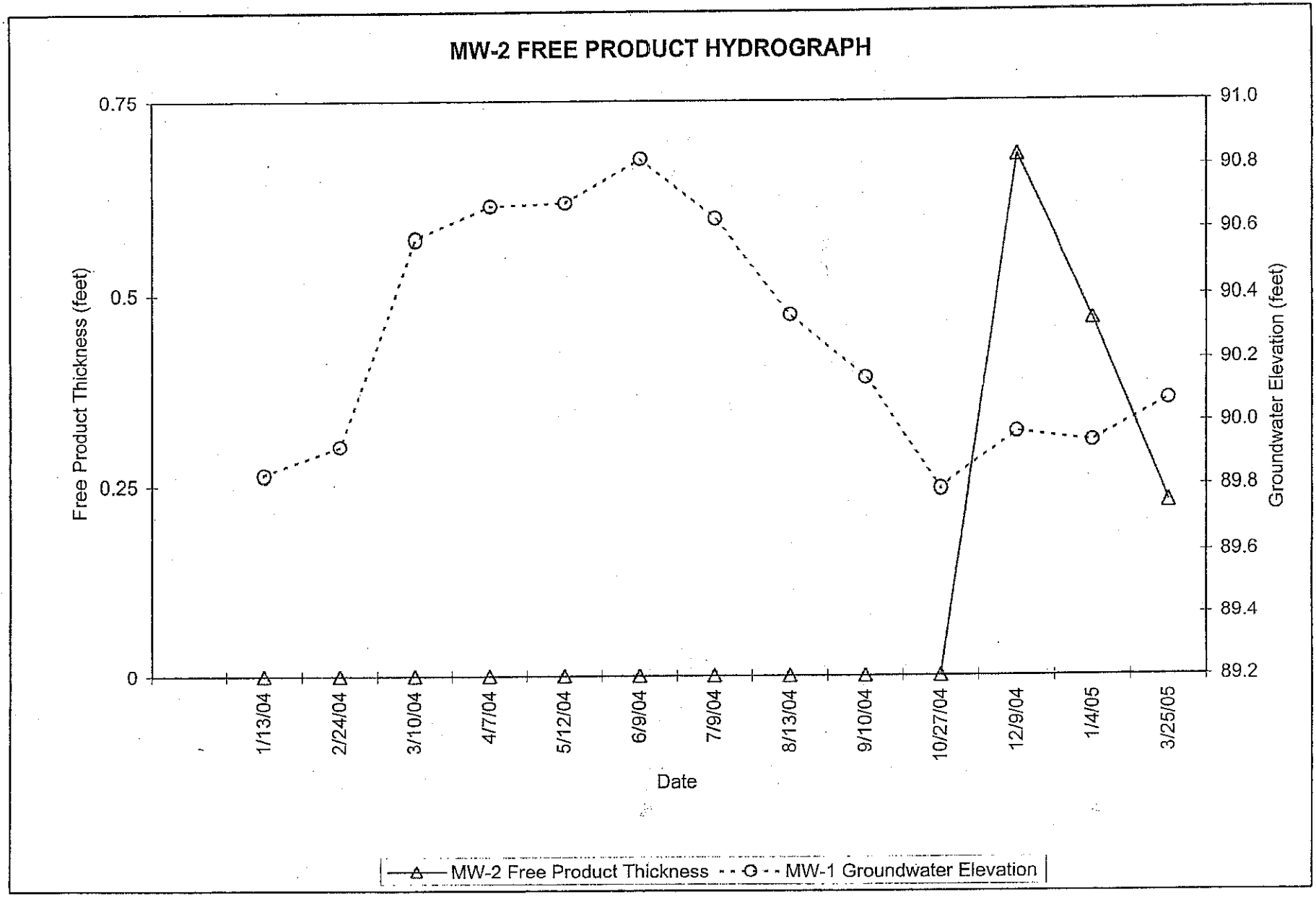
TABLE 1 - Continued

VELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-20	1/13/04	9.96	0	0	0.00
	2/24/04	10.01	0	0	0.00
	3/10/04	9.47	0	0	0.00
	4/7/04	9.38	0	0	0.00
	5/12/04	9.27	0	0	0.00
	6/9/04	9.24	0	0	0.00
	7/9/04	9.45	0	0	0.00
	8/13/04	9.64	0	0	0.00
	9/10/04	9.81	0	0	0.00
	10/27/04	10.58	0.96	0.02	0.02
	11/16/04	10.55	2.04	0.04	0.06
	12/9/04	10.38	4.68	0.03	0.09
	1/4/05	10.08	0.02	0.01	0.10
	2/28/05	9.97	0.48	0.02	0.12
	3/25/05	9.86	0	0	0.12
				Total gallons recovered by NESA & Associates	0.12

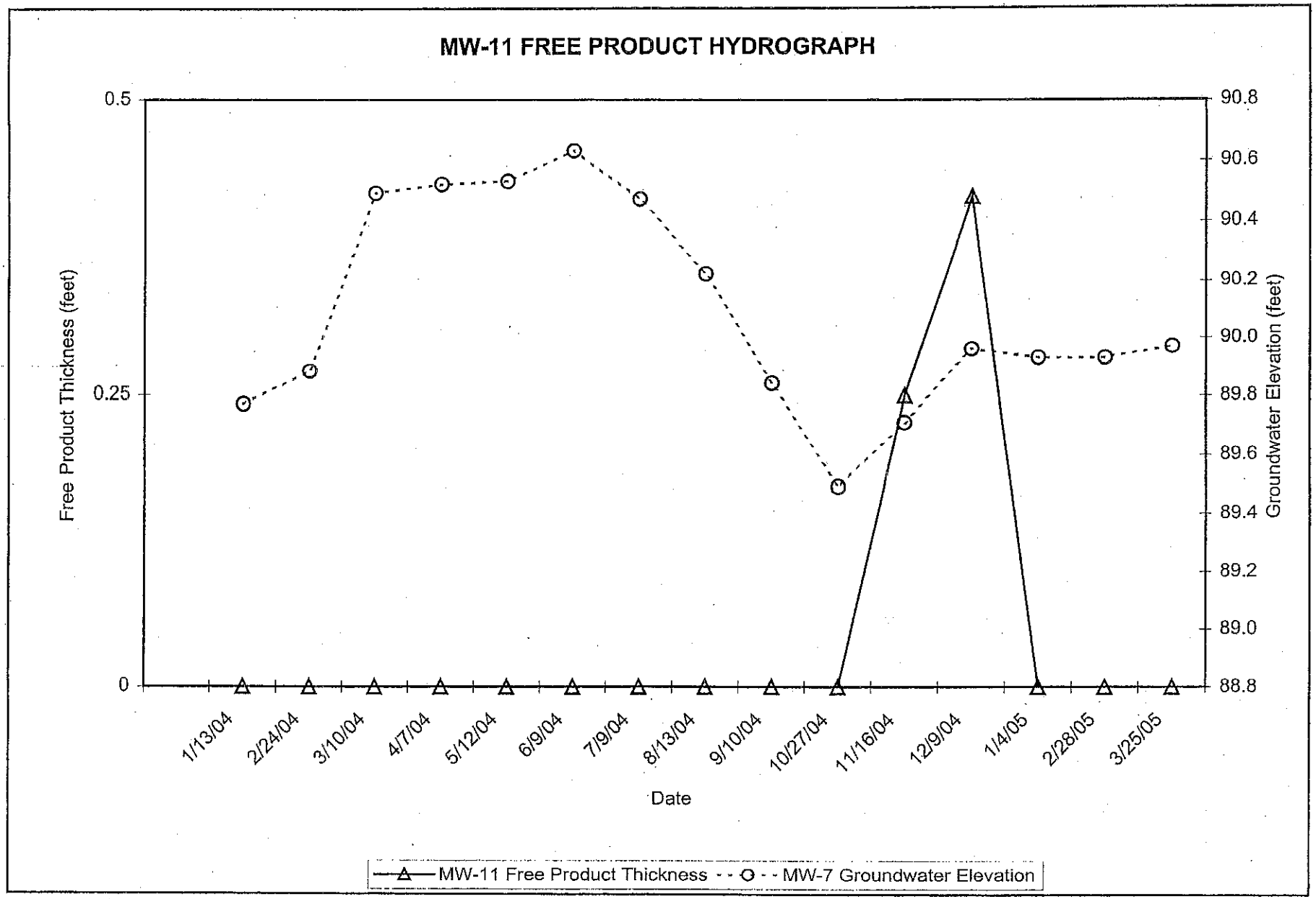
WELL	DATE	DEPTH TO WATER (feet)	FREE PRODUCT THICKNESS (inches)	FREE PRODUCT RECOVERED (gallons)	CUMULATIVE GALLONS RECOVERED
MW-21	4/7/04	9.40	0	0	0.00
	5/12/04	9.27	0	0	0.00
	6/9/04	9.25	0	0	0.00
	7/9/04	9.47	0	0	0.00
	8/13/04	9.65	0	0	0.00
	9/10/04	9.79	0	0	0.00
	10/27/04	10.34	0.12	0.02	0.02
	11/16/04	10.41	0.96	0.01	0.03
	12/9/04	10.22	2.16	0.03	0.06
	1/4/05	10.07	0	0	0.06
	2/28/05	9.96	0	0	0.06
	3/25/05	9.86	0	0	0.06
				Total gallons recovered by NESA & Associates	0.06

GRAPHS

GRAPH 1A

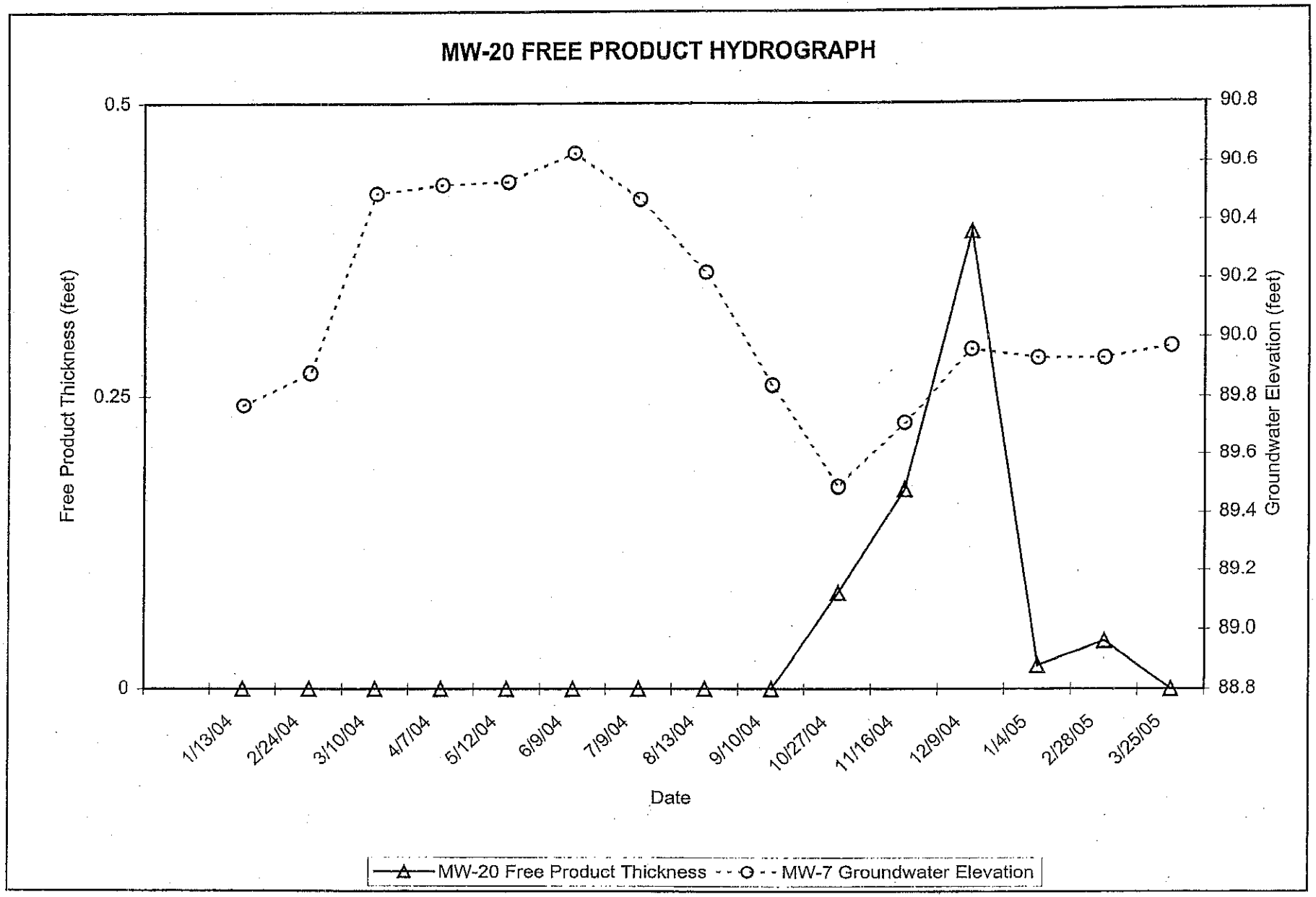

MW-2 FREE PRODUCT HYDROGRAPH
Free Product Thickness (feet)
0.75
0.5
0.25
0
Groundwater Elevation (feet)
91.0
90.8
90.6
90.4
90.2
90.0
89.8
89.6
89.4
89.2
1/13/04
2/24/04
3/10/04
4/7/04
5/12/04
6/9/04
7/9/04
8/13/04
9/10/04
10/27/04
12/9/04
1/4/05
3/25/05
Date
MW-2 Free Product Thickness
MW-1 Groundwater Elevation

GRAPH 1B

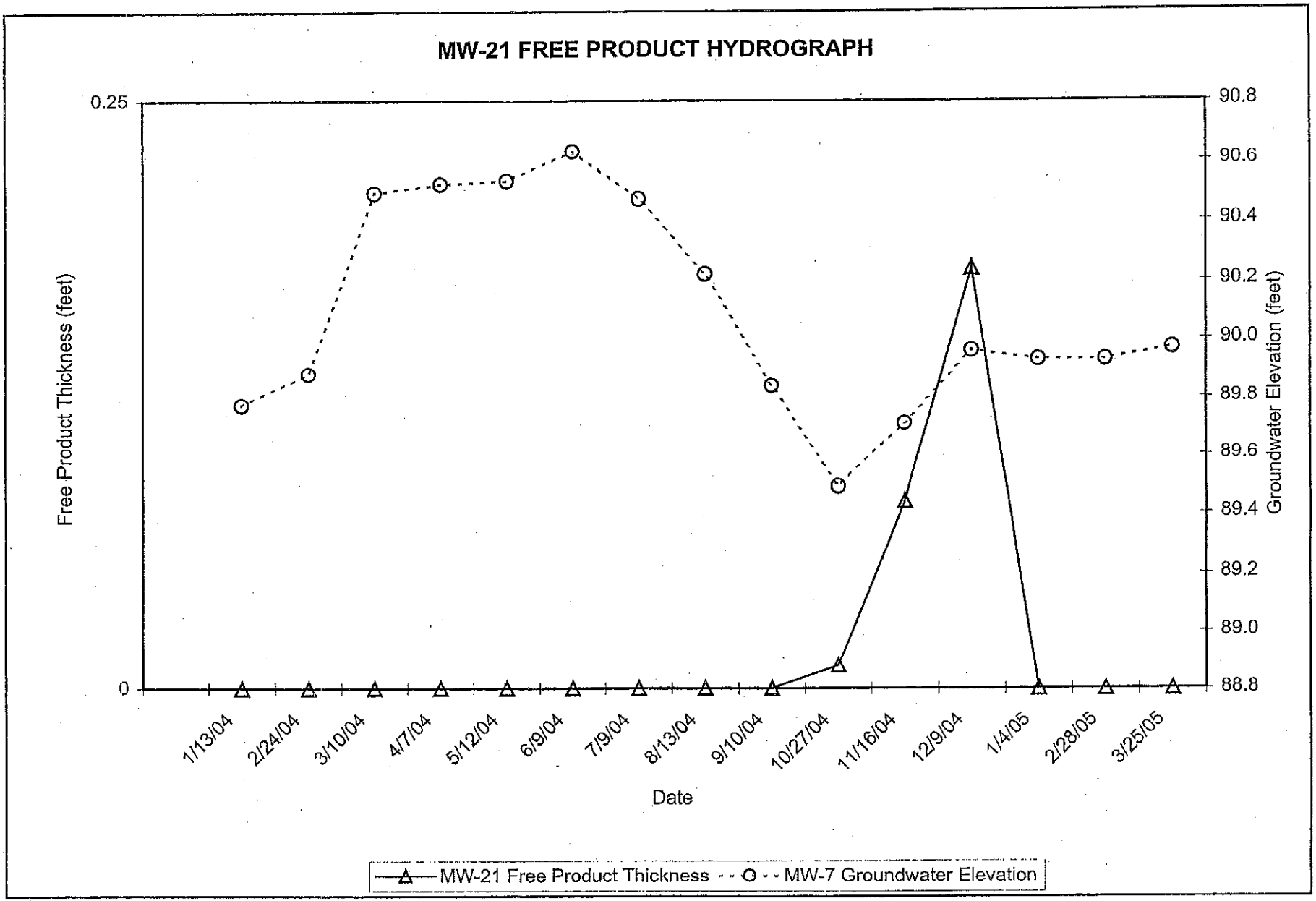


NESA & Associcates

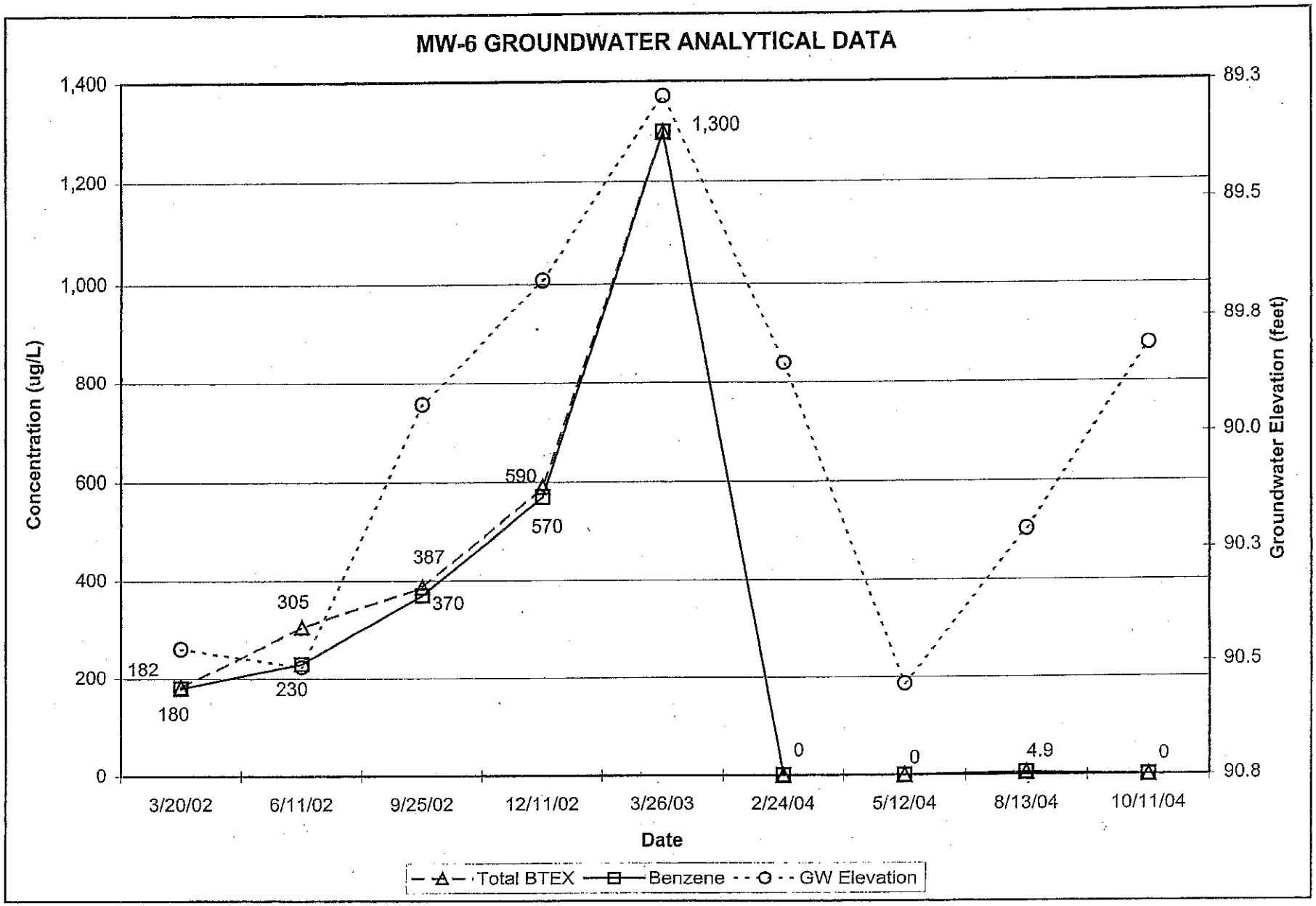
GI PH 1C


MW-20 FREE PRODUCT HYDROGRAPH
Free Product Thickness (feet)
Groundwater Elevation (feet)
0.5
0.25
0
90.8
90.6
90.4
90.2
90.0
89.8
89.6
89.4
89.2
89.0
88.8
1/13/04
2/24/04
3/10/04
4/7/04
5/12/04
6/9/04
7/9/04
8/13/04
9/10/04
10/27/04
11/16/04
12/9/04
1/4/05
2/28/05
3/25/05
Date
MW-20 Free Product Thickness
MW-7 Groundwater Elevation

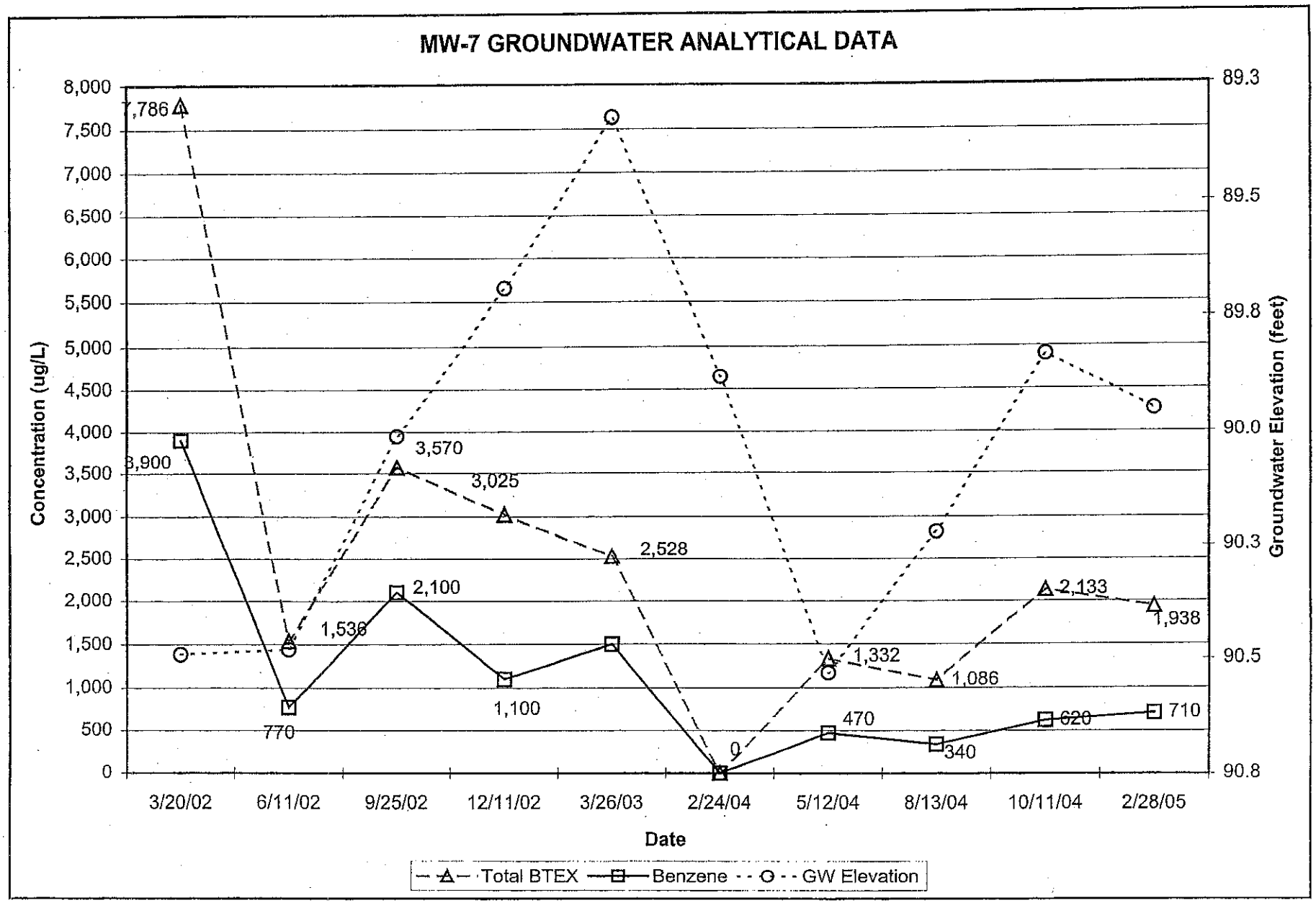
GRAPH 1D


MW-21 FREE PRODUCT HYDROGRAPH
0.25
0
Free Product Thickness (feet)
90.8
90.6
90.4
90.2
90.0
89.8
89.6
89.4
89.2
89.0
88.8
Groundwater Elevation (feet)
1/13/04
2/24/04
3/10/04
4/7/04
5/12/04
6/9/04
7/9/04
8/13/04
9/10/04
10/27/04
11/16/04
12/9/04
1/4/05
2/28/05
3/25/05
Date
MW-21 Free Product Thickness
MW-7 Groundwater Elevation

GRAPH 2


MW-6 GROUNDWATER ANALYTICAL DATA
Concentration (ug/L)
Groundwater Elevation (feet)
1,400
1,200
1,000
800
600
400
200
0
89.3
89.5
89.8
90.0
90.3
90.5
90.8
182
180
305
230
387
370
590
570
1,300
0
0
4.9
0
3/20/02
6/11/02
9/25/02
12/11/02
3/26/03
2/24/04
5/12/04
8/13/04
10/11/04
Date
Total BTEX
Benzene
GW Elevation

GRAPH 3



NESA & Associates, Inc.

MN 1051

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

REPLY TO:

SAGINAW BAY DISTRICT OFFICE
STORAGE TANK DIVISION
503 NORTH EUCLID AVENUE, SUITE 1
BAY CITY, MICHIGAN 48706-2965

October 10, 2000

COPY

Mr. Shay Wideman
TPI Petroleum, Inc.
P.O. Box 696000
San Antonio, TX 78269-4663

Dear Mr. Wideman:

SUBJECT: TPI PETROLEUM, INC. #4312
815 N. MISSION STREET
MT. PLEASANT, ISABELLA COUNTY, MICHIGAN
FACILITY ID # 0-016792

Staff of the Michigan Department of Environmental Quality (MDEQ) have completed an audit of the April 4, 2000, Final Assessment Report (FAR) prepared for the above referenced facility. The following deficiencies were identified:

1. The vertical and horizontal extent of groundwater contamination has not been defined. Section 2.3 of the FAR states that additional wells will be placed to the north of the site. These wells would likely define the down gradient extent, but the up gradient and side gradient extent must also be delineated.

2. The extent of free product has not been defined.

3. Figure 2 of the FAR shows the location of the underground utilities but does not include the location where the utilities came onto the subject property and connected to the former building.

4. The utility corridors have not been adequately evaluated as a potential migration pathway for impacted groundwater.

5. Section 1.0 of the FAR states that a monitoring well was installed in the southern tank excavation to monitor and recover free product and that no free product has been identified since it was installed. Figure 4 shows that a monitoring well (MW-4) was located in the subject area but has been destroyed. Provide an explanation of how free product monitoring is being completed in this area.

6. The Corrective Action Plan (CAP) as presented in Section 6.0 of the FAR is unacceptable. Provide documentation supporting that the installed Multi-Arrayed Vacuum (MAV) System is appropriate for this site (i.e. bail down test results, established radius of influence). The proposed Direct Oxygen Injection Technology (DO-IT) is considered a biospaging remediation. Site specific data needs to be gathered and evaluated to determine the appropriateness of this technology at this specific site. Provide detailed information such as: Intrinsic permeability, soil structure and stratification, temperature of the groundwater, pH level, microbial population density, nutrient concentrations, iron concentrations dissolved in groundwater, etc.

7. If the DO-IT technology is feasible at this site, then incorporate additional monitoring criteria into the proposed quarterly groundwater monitoring program (i.e. dissolved oxygen, carbon dioxide, pH, temperature, etc.).

8. Section 6.5 of the FAR does not contain a schedule for how often the MAV activities will be implemented.

9. Section 6.5 of the FAR states that monthly Free Product Recovery Status Reports will be submitted to the MDEQ. Since the submittal of the FAR back in April 2000, the MDEQ has only received one Free Product Recovery Status Report dated June 22, 2000.

10. A summarization of each MAV activity should be included in the monthly Free Product Status Reports.

Please provide a written response to the above referenced deficiencies. A schedule for anticipated on-site work activities and report submittals should be included in the written response. Upon completion of additional investigative activities a revised CAP must be submitted to this office. If you should have any questions please feel free to contact me at the number listed below.

Sincerely,

Ann M. Person

Ann M. Person
Environmental Quality Analyst
Storage Tank Division

cc: Doug Hull, Compliance, Inc.

ATTACHMENT E

MDEQ Storage Tank Information Database

Storage Tank Information Database

Storage Tank Facilities List

SID-DEQ

Facility and Tank Details

Facility Information:
Facility ID:00016792
Total #4312
815 N MISSION, MT PLEASANT, MI 48858
Phone# : (734) 941-5518

Owner Information:
Total Petro Inc
28001 Citrin Dr, Romulus, MI 48174
Phone# : (734) 946-5500

Tank ID	Tank Status	Capacity (in gallons)	Installation Date	Substance Stored	Tank Release Detection	Piping Release Detection	Piping Material	Piping Type	Construction Material	Impressed Device
1	Removed from Ground	12000	4/21/1976 12:00:00 AM	Gasoline	Manual Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No
2	Removed from Ground	6000	4/21/1976 12:00:00 AM	Gasoline	Automatic Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No
3	Removed from Ground	6000	4/21/1976 12:00:00 AM	Gasoline	Automatic Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No
4	Removed from Ground	6000	4/21/1976 12:00:00 AM	Gasoline	Manual Tank Gauging	Automatic Line Leak Detectors	Bare Steel	Pressure	Asphalt Coated or Bare Steel	No

Release Information

Leak ID	LUST Site Name	Discovery Date	Substance Released	Release Status	Closed Date	Evaluation	Land Use Restrictions
C-0163-99	Total #4312	02/23/1999	Gasoline	Open			

Storage Tank Information Database

Facility GPS Information

SID-DEQ

Facility GPS Details

Facility Information:
Facility ID:00016792
Total #4312
815 N MISSION, MT PLEASANT, MI 48858
Phone# : (734) 941-5518

Owner Information:
Total Petro Inc
28001 Citrin Dr, Romulus, MI 48174
Phone# : (734) 946-5500

Facility ID	Latitude	Longitude	Date of Collection	Accuracy	Accuracy Value Unit	Horizontal Datum	Source	Point Line Area	DESC CATERGORY	MTHD OF COLLECTION
00016792	43.6117870000	-84.7680110000	10-05-2004	100	FEET	NAD83	STATE OF MICHIGAN	POINT	Plant Entrance (Freight)	Address Matching-House Number

Storage Tank Information Database

Leaking Underground StorageTank

SID-DEQ

Search Results

Records 1 to 1 of 1 for Site Street: 815 n mission; Site Status: Open;
Click on the Site ID for tank and release information. Click on the Site Name for GPS information.

*** Owner Details (Owner may not reflect the current owner and is not necessarily the Lust liable party. For Lust liable party information please contact the RRD district office for the given site.)**

Site ID	Site Name	Site Address	Owner Name	Owner Address
00016792	Total #4312	815 N MISSION MT PLEASANT, MI 48858 (734) 941-5518	Total Petro Inc	28001 Citrin Dr Romulus, MI 48174 (734) 946-5500

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